

**MEETING MINUTES
OF THE DVRPC REGIONAL CITIZENS COMMITTEE
APRIL 15, 2008**

Present: Warren Strumpfer (Chair), John Burkhardt, Kathryn Garza, Bridget Chadwick, Dennis Winters, Joe DiMedio, John Boyle, Ernest Cohen, Lorraine Brill, William Faltermayer, Ajay Creshkoff, Bob Machler, John Pawson, Donna DiStefano, Tim Arnold (citizens); John Matheussen, Robert Box, Ann DuVall, Jerry Kane, David Director, Larry Menkes (guests); Jane Meconi, Michael Boyer, Laurie Matkowski, John Ward, Jean McKinney, Don Shanis, Karen Cilurso, Chris King, Chris Henrick, Joseph Hacker (staff)

APPROVAL OF MINUTES:

The minutes of the March 18, 2008 RCC meeting were approved as mailed.

CHAIRMAN'S REPORT:

Warren Strumpfer, RCC Chair, noted that he was unable to attend last month's Board meeting and Cheryl Tumola attended on his behalf. She forwarded the following report for the RCC meeting minutes:

I attended the DVRPC Board meeting in Warren Strumpfer's stead on March 28, 2008. The recommendations of the RCC were heard and respectfully considered by the DVRPC Board. Just prior to the meeting material was presented to me that addressed some of our concerns dealing with the deteriorating condition of the multi-use path in Valley Forge Park – a multi-use path will be constructed near the new road. Our concerns were relayed none the less and were largely assuaged by this material. The Commodore Barry Bridge/ I-95 Interchange project and our comments concerning it caused some consternation on the part of the Board. It was explained to them that we felt that a Categorical Exclusion from a complete Environmental Impact Statement was not appropriate given that this is an area of environmental justice concerns. Additional material was again presented just prior to the meeting; it seems that the RCC should have been privy to what had been done in lieu of an EIS at the time of our consideration of the project and I said so. I was assured that no houses were being demolished for the project.

Comments concerning the Cresheim Valley drive project were addressed at the meeting in a memo which stated that "Sustainable Design" is not part of the scope of the project and that the City believed that the larger inlets would not have significant impact. We may want to follow up on the Downingtown project if possible with regard to bicycle facilities because we were told that they are still being "considered". In general I believe that the RCC does not always have a complete picture of the projects we are asked to evaluate.

While sharing that the RCC heard a presentation by John Madera on the 2005 survey of Bicycling in the Delaware Valley I neglected to speak about our suggestions for how this survey could be put to good use but would like to have them forwarded to the Board in the future if possible.

RTC REPORT:

John Boyle, RCC representative to the RTC, noted that some interesting presentations were part of the RTC meeting. Chick Dougherty, DVRPC Director of Technical Services, displayed a new search system for TIP projects which utilizes Google Maps. Jane Meconi was able to display this information for RCC members and showed that the new program illustrated where a TIP project is and what type of project it is. The TIP online search/mapping program can be found at <http://www.dvrpc.org/transportation/capital/TIP.htm>.

Mr. Boyle also noted that the RTC had a Travel Trends presentation, and he was glad to see that bicycle and pedestrian trips were included in the assessment.

REPORTS FROM OTHER COMMITTEES:

Lorraine Brill reported on the RTAC meeting and asked that the meeting minutes be attached to the RCC minutes.

DVRPC BOARD AGENDA ITEMS:

The items below are agenda items for the DVRPC Board. As per the new RCC format, a "consent agenda" format is in place, meaning that the RCC does not have to address every agenda item before them.

PA07-91: Federal Preventative Maintenance Program (MPMS #60317), SEPTA

John Boyle, Action Task Force Chair, noted that SEPTA has requested that DVRPC modify the FY2007-2010 TIP for Pennsylvania by expanding the scope of the Federal Preventative Maintenance Program (MPMS #60317) to include the overhaul of SEPTA rail vehicles including Broad Street Subway, Norristown High Speed Line, Market-Frankford, Light Rail Vehicles and Regional Rail cars, and increasing the program by \$50 million (\$40,000,000 FTA 5309/\$10,000,000 Local) in FY08.

The \$40.250 million currently programmed provides funding for all activities associated with vehicle and facility maintenance, including administration, repair of buildings, grounds and equipment; operation of electric power facilities, maintenance of vehicle movement control systems, fare collection, counting equipment and structures, maintenance of general administration buildings, grounds and equipment, and electrical facilities. Additional funding will be programmed in FY08 (\$40,000,000 FTA 5309/\$10,000,000 Local) for the operating phase, to be used specifically for the rail vehicle overhauls.

ACTION TAKEN BY COMMITTEE:

The RCC recommends that the DVRPC Board approve TIP Action PA07-91, SEPTA's request to modify the FY2007-2010 TIP for Pennsylvania by expanding the scope of the Federal Preventative Maintenance Program (MPMS #60317) to include the overhaul of SEPTA rail vehicles including Broad Street Subway, Norristown High Speed Line, Market-Frankford, Light Rail Vehicles and Regional Rail cars, and increasing the program by \$50 million (\$40,000,000 FTA 5309/\$10,000,000 Local).

Authorization to Open 30-Day Public Comment Period for an Amendment to the Destination 2030 Long Range Plan; the Draft 2009 Transportation Improvement Program (TIP) for New Jersey (FY2009-2012) and for Pennsylvania (FY2009-2012); and for the Conformity Determination of the TIPs and the 2030 Long Range Plan

Federal law and planning regulations require the development of a Transportation Improvement Program (TIP) in order for the metropolitan region to be eligible to receive federal transportation funds. The creation of the TIP is to be done by the MPO in cooperation with the state and transit operators, and must provide opportunity for input and comment by the public. These same laws and regulations require the MPO to have a long-range plan and to update that plan periodically as new conditions or policies are determined or to amend that plan to include new components. A 30-day comment period must be conducted prior to a formal action to adopt the TIP or update/amend the plan.

Every other year DVRPC develops a TIP that covers both state portions of the region (the New Jersey portion is done every year). Work began in September 2007 on the development of the FY 2009-2012 TIPs for the New Jersey and Pennsylvania portions of the region. The New Jersey and Pennsylvania Subcommittees of the RTC, under the direction of the DVRPC staff, have been working on a draft TIP that meets the requirements of the federal laws and regulations, including those concerning financial constraint, air quality, plan consistency and environmental justice. DVRPC needs to adopt the 2009 TIP no later than the June Board meeting so that the states can submit their 2009 Statewide Transportation Improvement Programs (STIPs) to the federal agencies for review and approval before the end of the federal fiscal year. The Pennsylvania portion must first be approved by the State Transportation Commission at its quarterly meeting.

DVRPC will also work closely with the Transportation Conformity Interagency Consultation Group to insure that the region has addressed the set of regulations issued by US DOT and US EPA concerning the impact of the TIP. The regulations prescribe specific emissions analyses and procedures to be performed, which DVRPC has employed under the guidance of the TCICG. The final conformity rule promulgated by US EPA (40 CFR 51 and 93) requires that the TIP and the Plan must not cause new air quality violations, worsen existing violations, or delay timely attainment of federal standards. Unless it is determined that the TIP and the plan "conform" to the Clean Air Act requirements and other applicable state air quality goals as embodied in each of the state implementation plans, US DOT cannot fund, authorize, or otherwise approve transportation programs or projects.

Staff recommends that the DVRPC Board authorize a 30-day comment period to allow further comment on the draft TIP and Conformity Determination documents and amendment to the long range plan by the public and other agencies. The draft documents will be available for public review on May 2nd, with the public comment period running through June 2nd. Following this 30-day public comment period, staff and the PA and NJ Subcommittees of the RTC will review the comments received and the RTC will prepare recommendations to the Board for adoption of the final TIP and conformity determination and long-range plan amendment.

Discussion: A public notice will be sent out with information regarding the comment period. Two information/comment meetings have been set, one for May 14 after the RCC meeting at DVRPC, and one on May 28, from 4-6 PM at the Cherry Hill Library.

ACTION TAKEN BY COMMITTEE:

The RCC recommends that the DVRPC Board authorize staff to open a 30-day public comment period for the purpose of gathering public and agency comments on the draft 2009 Transportation Improvement Program (TIP) for New Jersey and for Pennsylvania (FY2009-2012) and the Conformity Determination of the TIPs and the amendment to the Destination 2030 Long Range Plan, to issue proper public notification, to publish the draft TIP, Conformity Determination and long range plan amendment on the Internet, to hold a public meeting, and to disseminate notices to individuals and organizations advising how to review the documents and submit comments.

The RCC further includes the following proposal regarding enlarging the context for authorizing public comment period for the draft FY 2009 Transportation Improvement Programs:

1. Once again, an “Action Item” on today’s RCC agenda (April 15, 2008) is “Authorization to Open a 30-day Public Comment Period” for the Draft Transportation Improvement Program for New Jersey and Pennsylvania for the next 3 fiscal years, this time FY 2009-2012.
2. We need to ask: What is and should be the “context” for opening such public discussion?
3. If past practice prevails, the DVRPC will “set the stage,” so to speak, for inviting public comment by briefly outlining what federal law requires and how its implementation fits into the regional planning currently underway.
4. It is proposed that the RCC recommend a “radical” departure from this “business as usual” approach by highlighting the need to invite or seek public comment on more comprehensive planning linking economic planning with sustainable environmental planning, and land use and transportation planning.
5. In other words, the public should be invited to enlarge the context or points of reference (connecting more dots!), for commenting on or considering current and future transportation and land use improvement programs.
6. This enlarged context approach would, hopefully, lead to more comprehensive, integrated regional development planning with committed participation by responsible public agencies.
7. Spearheaded by the DVRPC, this “revolutionary” approach could eventually lead to organizing better currently fragmented investments in transportation and land use, and targeting them where they will provide the greatest economic return to the region.

SPECIAL PRESENTATION: PATCO EXPANSION PRESENTATION:

John Matheussen, CEO of the Delaware River Port Authority and President of PATCO, presented PATCO's plans for expanding service in both Philadelphia and New Jersey. Mr. Matheussen first reviewed the responsibilities of the DRPA, of which PATCO is a part. In addition to PATCO, DRPA includes bridges, such as the Ben Franklin Bridge, among others, as well as port functions.

PATCO runs from Lindenwold, New Jersey to 15th and Locust Streets in Philadelphia, via the Ben Franklin Bridge. As an introduction, Mr. Matheussen reviewed the current rail transit network disparity. Compared to southeast Pennsylvania and northern New Jersey, which have comprehensive rail networks, southern New Jersey has limited rail options.

The PATCO Alternatives Analysis is a first step in the FTA's planning process. The alternatives were analyzed under the following criteria which includes evaluating needs, alternatives and associated issues; transportation and community needs; potential alignments and station locations; key environmental impacts, and ridership costs and funding. Public outreach and input has also been part of the process.

Mr. Matheussen and Robert Box, PATCO General Manager, presented the various alternatives for Philadelphia, which may potentially affect various communities in and around Center City, with the primary focus of connecting to the waterfront. The New Jersey alternatives include new PATCO lines extending to Williamstown or Glassboro. There are 5 alternatives proposed for New Jersey and 4 alternatives proposed for Philadelphia.

The presentation concluded with a list of next steps, which include completing the Purpose and Need Statement; developing and refining the transit alternatives; preparing a travel demand forecast, developing capital and operating cost estimates; performing conceptual engineering and identifying major environmental impacts; and evaluating and comparing alternatives. There will also be a second round of open house public meetings. Mr. Matheussen concluded by noting that information, as well as the opportunity to comment, is available via their website, www.ridepatco.org.

Discussion: Ajay Creshkoff asked what time horizons were used? Mr. Box replied a 25-year horizon. Mr. Creshkoff suggested shorter horizons should be used. It was noted that the horizon year used was the federal mandate. Mr. Matheussen noted that they are looking at the project broadly, but that they are constrained by the rules to receive federal funding. Many RCC members felt that development should focus on the New Jersey side, and that there is already enough options to get to the Philadelphia waterfront. Mr. Box noted that if there is increased development on the waterfront, then more transit options would be needed. It was noted that the feasibility studies for the Philadelphia expansion began prior to discussion of the casinos. There were also several questions about reactivating ferry service, although Mr. Matheussen noted that ferry service usage is seasonal and is used mostly for tourism/leisure, and does not seem to be that viable for commuting. Kathryn Garza asked if there had been any investigation of fuel and emission savings as a result of the expansion. It is estimated that 10-12 thousand cars would be removed from the roads as a result of the expansion. Dennis Winters noted that PATCO is great for bicyclists. He also asked if the ADA Compliance project on the Ben Franklin walkway is planned. Mr. Matheussen replied that it is in the 5-year capital plan. Warren Strumpfer asked what type of funding has been committed. So far \$250 million has been committed, and PATCO is also pursuing federal dollars. They are also investigating private funding as a result of Transit Oriented Development surrounding their stations.

SPECIAL PRESENTATION: SEPTA NEW PAYMENT TECHNOLOGIES PROJECT:

Gerald Kane, *SEPTA Manager, Capital Program Planning*, gave an update on SEPTA's undertaking of fare modernization. He noted that the existing fare collection equipment is mechanically sound, but functionally obsolete, and that the system lacks a complete electronic ridership reporting capability. The transit industry is now moving toward contactless payment systems. SEPTA reviewed other fare collection systems in other cities, such as Chicago, Atlanta, and Washington DC, as well as PATCO's new Freedom Card. Also investigated were the associated costs of projects, as well as associated timelines of implementation.

SEPTA's project vision is an electronic fare collection system which is: secure, reliable, easy to understand, self-service, convenient and usable by all riders, provides seamless travel across all SEPTA services and allows for regional integration. The new fare collection system would also provide complete and accurate revenue accountability, continual ridership data, reduces cash handling and fosters fare policy innovations.

The update of SEPTA's fare modernization system includes an open payment system using contactless technology, and would accept payment from a variety of sources, including credit cards, SEPTA branded cards, pre-loaded cards and other devices.

Mr. Kane also presented a proposed timeline for the initial stages of the project: a Request for Information was sent in March 2008, Request for Proposals will be released this summer, submissions will be received in the fall and the contract awarded in Winter 2008.

Discussion: David Director asked what types of backup provisions would be in place in case of system failure. Mr. Kane replied that system failure provisions and risk management would be central to the RFP, but noted that failure rarely happens currently in regular retail situations. It was also asked if the data collected under the new system would be mined in real time to make operational decisions. Mr. Kane replied that the new system will help SEPTA make decisions regarding crowding and adding extra trains. There was also discussion regarding compatibility between PATCO and SEPTA.

LONG-RANGE TASK FORCE REPORT:

Please see the attached Long-Range Task Force report.

OLD/NEW BUSINESS:

Ernest Cohen introduced Larry Menkes, who presented at the April 6 Conference at Widener University. He also asked to include an abstract presented by John Madera at the April 6 conference. It is attached to these meeting minutes.

Bridget Chadwick noted that the RCC should work on a policy/process for integrating bike/ped and intermodal connections into projects without having to comment on individual TIP projects. A committee may be set to meet after the monthly Action Task Force meeting to discuss these issues to develop and RCC position on this issue, and would address not only state projects, but also county and municipal projects.

Joe DiMedio noted that more work needs to be done to reduce highway fatalities. Lorraine Brill noted that the CMP is working toward that goal.

On Thursday, April 17, there will be a sustainability fair at 30th Street Station, as well as a panel in the evening at the Academy of Natural Sciences.

It was noted that there will be an Air Quality Action Ozone Season Kickoff on April 25, 2008 at 10:30 AM at the Plaza at King of Prussia Mall, on the lower level. There will be a press conference and an awards ceremony. Awards will be given to Montgomery County and meteorologist David Murphy for their efforts to improve air quality.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website may be translated into Spanish, Russian, and Traditional Chinese online by visiting www.dvrpc.org. Publications and other public documents can be made available in alternative languages or formats, if requested. For more information, please call (215) 238-2871.

Meeting Minutes

DVRPC Regional Transit Advisory Committee

1st of April, 2008

Staff presented FY 2008 project status updates for:

- a. *I-76 Bus to Bus Study* for SEPTA, project is on track.
- b. *Airport Study*, Roger Moog project, transit program and Delaware County involvement is on schedule.
- c. *Technical Memorandum* for the Paoli Transportation Center in collaboration with SEPTA and Chester County. A justification for parking #'s, and is nearing the end.
- d. *NJT/Bucks Co Survey Work* is within the final stages, waiting on surveys to be printed in order to determine a comprehensive ridership analysis of Hamilton and Trenton stations. 10,000 mail back surveys will be distributed on the station platforms. Also, a South NJT Bus survey of six routes, smaller in survey size, is on track time-wise.
- e. *Seamless Regional Transit*, new interstate bus connections - modeling has been completed and a draft report is in progress.
- f. *DVRPC's Regional Transit Vision, Dots and Dashes* is completed, work on narratives beginning soon.
- g. *SEPTA Speed Improvement*, draft is completed and a micro simulation analysis is likely for Phase II in FY09.

Staff also outlined projects for inclusion in next year's transit program, noting that DVRPC Board-related projects will be incorporated into the assigned program without additional funding. The Transit Program for FY09 includes:

- Lindenwold transit hub study (designated by DVRPC Board)
- SEPTA speed improvement phase 2 follow up to FY08, including a micro simulation analysis of the Transit Signal Priority to assess the efficiency of existing TSP infrastructure.
- SEPTA Regional Rail East Falls and Wissahickon stations survey
- NJT Bus Survey continues next year with fewer total surveys.
- FHWA Bicycle/Bus Conflict Study coordinated between SEPTA, The Bicycle Coalition of Greater Philadelphia, University City, and The Philadelphia Streets Department to issue a pilot program using painted marking, signage zones and bus operator education.
- It was asked if a feasibility study for a new Regional Rail Station in Delaware County be included, for the upcoming addition of a major league soccer team? A scope of the project should be written up. Different elements, such as using existing stations with bus shuttles, need to be included. Any ideas for FY09 projects should be written up and submitted for consideration.

Greg Krykewycz, DVRPC Transportation Planner, gave a presentation updating the RTAC on the DVRPC Regional Transit Vision for 2035 project. The Dots&Dashes outreach results were summarized and the four proposed transit vision narratives were summarized:

- Expansion of the SEPTA Broad Street Line to the Navy Yard in the south and to the Boulevard in the north.
- Philadelphia Delaware River Transit development through the use of

- trolleys.
- PATCO southern NJ expansion, emphasizing smart growth land use near the proposed new stations.
- Traditional and Reverse Commutes to Center City.

Concerns were raised about the Northeast Philadelphia Rapid Transit project; namely, that it may have been dropped in favor of Navy Yard expansion. An EIS is needed, as well as approval of the current administration. Roosevelt Boulevard rapid transit could have huge implications for improving air quality and mobility, in addition to possible reductions of up to 50% of single occupied vehicle trips and improved commuting time. Both northeast and southern BSL extensions will be reflected in the vision.

**RCC LONG-RANGE TASK FORCE MEETING REPORT
APRIL 18, 2008**

Possible directions for our region in 2035 can be gleaned by comparing three diverse sources:

(a) the "Climate Change Overview" from our February meeting, especially the pages "Priority #2 Use Clean Energy" and "Sectoral Emission: NJ and PA".

(b) "Coal Plants of the Northeast", a map from Trains magazine, June 2002, pp 68-9.

(c) U.S. Department of Energy National Renewable Energy Laboratory: "Wind Resource Maps" (internet under those keywords), especially the maps for U.S., New Jersey, and Pennsylvania.

Some observations and conclusions:

1. The location and outputs of U.S. power plants (a) do not coincide with population centers. Therefore, electric transmission over long and short distance is common.
2. Coal-fired electric power plants in NJ and PA use coal from PA, MD, OH, and WV exclusively (a,b).
3. New York City, New England, and Florida are the only regions with significant electricity from oil, which comes mainly from Venezuela (b).
4. NJ and PA have about five nuclear-powered electric plants (a).
5. PA has two hydroelectric plants, both on the lower Susquehanna River and now forming only a small part of the state's electrical output (a,b).
6. NJ and NJ have no large natural-gas power plants (a).
7. Coal is the major fuel source for electric power in NJ and PA (a). There are about 25 such plants, five of which are in NJ (a,b).
8. NJ is a net importer of electricity (a), for only 16% of NJ's CO₂ emissions result from electricity generation; PA is a net exporter, for 37% of its emissions result from electricity generation.
9. Therefore in Northeastern U.S., we can say that coal in trains and electricity now tends to move eastward, as does the pollution.
10. Given that there are mining companies and miners in PA with political clout but not in NJ, a shift to renewable sources should be expected to come faster and easier in the latter state.
11. Strongly reinforcing this conclusion is the matter of wind resources (c). Off the NJ coast exist some of the strongest winds in the continental U.S. The five new wind

turbines at the Atlantic City wastewater plant are located only between the zones rated "marginal" and "fair" by DoE.

Immediately off-shore and in Delaware Bay are winds marked as "good". "Excellent" winds exist only two miles off Cape May Point and Stone Harbor and farther out at other points. Still farther out are "superb" winds, the wind-speed range which would be exploited off Nantucket by Cape Wind. PA has comparable winds only at a few points in the Allegheny Mountains and generally offshore on Lake Erie.

DVRPC was to have received bids for an initial study "Regional Greenhouse Gas Emissions Inventory and Forecast last month. This report and other actions are expected to lead to a "Regional Climate Change Action Plan". RCC can have a part in developing this initiative.

Three regional advances for cleaner and cooler air could be based on the previous facts:

1. A Wind-Powered South Jersey. Given the non-coal political climate and the nearby winds, southern NJ's percentage of electricity from wind could approach where Denmark and the northern German states are now, 20%+.
2. A "Hydrail" Atlantic City Rail Commuter Line. Already suggested as an addition to wind power are hydrogen generation and hydrogen fuel-cell locomotives. This would be an American "first".
3. A Mostly-"Green" PATCO. Except for the Philadelphia trackage, most of that line's power now comes from non-renewable NJ sources. Coastal wind power and sufficient transmission lines would make this possible. Interestingly, PATCO's parent, the Delaware River Port Authority, already has jurisdiction in all of southern NJ for some of its missions. Informally now and perhaps formally later with extension of its powers to include renewable energy, DRPA could play a role establishing cleaner and cooler electric power in this part of the world.

John Pawson

A Vision of a Sustainable Transportation Future

Presented by John Madera at "Putting You in Sustainability" a conference sponsored by SSAP (Sustainable Society Action Project) and Widener University on April 6, 2008

"Where there is no vision, the people perish." Proverbs 29:18

In 2006 the USDOT celebrated the 50th anniversary of Federal Interstate Highway System, the largest public works project in history. Yet this event came and went largely unnoticed. Most people take the Interstate system for granted, something any functioning government provides for its citizens as of right. Such a huge undertaking is not the natural outcome of representative government; a small number of people with a vision worked tirelessly to make it a reality. Driving coast-to-coast non-stop, tying disparate regions together in a single national economy, facilitating the nation's defense these were the selling points. But it was the 1939 GM Futurama exhibit that caught the public's imagination.

In 2008 there is no grand national vision on the order of an Interstate program. We haven't yet gathered the political will to maintain what we have; and there has even been serious discussion questioning any federal role in transportation. Many influential people, including some politicians and transportation professionals, believe our auto-dominant system to be the natural order of things.

Yet glimpses of a sustainable transportation future can be seen, and people of vision are taking notice. A group of professionals and academics from our region just took a trip to Toronto, to see how that city has successfully married land use and mass transit. Several European cities have substantially reduced auto travel while dramatically increasing bicycle and mass transit use. A noted Danish planner recently spoke to a large Philadelphia audience on how Copenhagen built its bicycling infrastructure piece by piece over three decades, "under the radar," resulting in the highest bicycle use of any major Western city; another presentation, on Paris's successful bike sharing program, also drew a packed house. An "individualized marketing campaign" devised in Australia provides a successful model for changing travel behavior in auto-dominant cities.

What is a sustainable transportation future likely to be?

1. More efficient: An increasing scarcity of fossil fuel reserves, along with new public policies to mitigate climate change, will continue to inflate the cost of burning petroleum fuels for moving people and goods. The economy will adapt by increasing the productivity of each unit of carbon-based energy. Look for more electric and hybrid passenger and freight vehicles. Expect a resurgence of bicycling and walking. More freight by rail and water, and less by truck and plane. The seriousness of the dual energy/environment crises will likely bring about new taxes on fuel, imposed costs on carbon emissions, and the return of a national speed limit.

2. More intelligent: Information technology will make transportation more efficient and more convenient. Current examples: EZ-Pass, PhillyCarShare, Velib (Paris bike sharing), GPS navigation, OnStar. Look for a universal EZ-Pass which includes transit; information on demand

on the best way to get to work (not just the fastest auto route), where to park, and when the next bus is coming.

3. Less: We will all travel fewer daily miles, and fewer ton-miles of freight will be shipped. City planners will respond to the demand for energy efficiency by planning for transit-oriented development, expanded mass transit service (so frequent that you won't need a timetable), mixed use neighborhoods of increasing density, and "Complete Streets" that make walking, bicycling and mass transit attractive options. Housing consumers will have a greater choice of locations that don't require a car to fully participate in society. Those with fewer means will become less isolated as more destinations become within reach. The highway system will shrink. The removal of urban freeways will accelerate, some from lack of repairs, reclaiming cities for people and nature.

What can we do in the Delaware Valley to make this future, sustainable transportation system a reality? What must we do so as to prevent a collapse of our present transportation system and the economy as petroleum gets in short supply and much more expensive in the future?