

MONITORING COMMITTEE



AGENDA

9.7.17

4:30 PM

**@Garfield Park
Recreation Center**
(multipurpose room)

PACKET

Exploratory Health Fair Survey
List of Transportation Projects

- Introductions
- Purpose of committee
- Eden Park/Hamilton Park Survey – *Victor Perez*
- List of Overall Transportation Projects and Prioritization – *Bill Swiatek*
- Safe Routes to School (SRTS) Projects – *Jake Thompson and Bill Swiatek*
- NAACP tour and DNREC air quality meeting – *Bill Swiatek*
- Other Recent Initiatives
- Other Business

Themes from Exploratory Field Research at Health Hook Up Fair
June 27, 2017

Background

Melissa Archer and Victor Perez, from the University of Delaware, performed exploratory research to determine common themes of environmental pollution concerns from local Rt. 9 residents who attended the Health Hook Up fair on June 27, 2017. This event, held in front of the Bowlerama on New Castle Ave., drew people from a variety of communities in the local area. Additionally, Archer and Perez also asked individuals that attended how interested they were in the Division of Air Quality's (DAQ) mobile air testing unit's presence in the area, its testing/sampling of air quality, and the results of the testing.

By situating themselves with the Wilmapco and the DAQ exhibitor tables, as well as talking to a few individuals sitting elsewhere at the event, Archer and Perez were able to identify some general concerns from the individuals that they spoke to. The survey questions that they asked were recorded by Archer and Perez themselves on handheld clipboards and paper surveys, and took no (nor asked for) identifying information from individuals (i.e., all data are completely anonymous). Additionally, even if a respondent provided some information about the community they resided in, this information was redacted from the survey.

Each survey was built using topics from the research of Cohen and colleagues (2012).¹ In short, Cohen and colleagues (2012) performed a health and environmental concerns survey in Richmond, CA, and Archer and Perez created 4 questions that were based on that general research approach. The questions were used as a loose guide to direct data collection, as some respondents may or may not have had environmental concerns. However, given the history of the area and a significant amount of outreach work done by Wilmapco while developing their Rt. 9 Corridor Plan, we were confident many residents would have environmental pollution concerns and experiences. The questions that we asked included:

- Generally, are you concerned about any environmental pollution in the area, and, if so, what?
- What are your experiences to make you concerned?
- What do you think the sources of pollution are?
- What would you like done about the sources of pollution?
- How interested are you in the DAQ mobile unit's presence in the area, its testing/sampling approach, and the results of the testing?

General themes we identified are presented here. Archer and Perez separately examined the results and summarized the findings, while Perez collated Archer and Perez's individual effort for this brief report. Please note that this exploratory research survey was completely anonymous, and is not intended as research evidence for dissemination or to contribute to a wider body of knowledge, nor can it be generalized to any specific population. The sample consisted of only 25 persons and is not intended to represent any single community or the larger

¹ Cohen, Alison, Andrea Lopez, Nile Malloy, and Rachel Morello-Frosch. 2012. "Our Environment, Our Health: A Community-Based Participatory Environmental Health Survey in Richmond, California." *Health Education & Behavior* 39(2):198-209.

population in the area. The purpose was to help generate some preliminary information to build more specific research instruments for use along Rt. 9 and in specific communities in the future.

Summarized Findings

General Concern for Environmental Pollution

- Most respondents (24) expressed concern for environmental pollution (broadly defined)
- Air quality; ground/soil quality
- Dust and dust toxicity
- Odor
- Trash/litter
- Chemicals
- Cancer
- Arsenic in soil; combustible chemicals in soil; lead in soil
- Close to landfill
- Water pollution
- Concerns for children playing in areas with waste and dumped materials

Experiences with Environmental Pollution

- Dust on clothing and cars; dust blowing across street from Diamond Materials
 - Cars covered in dust again after cleaning the next day, even within a few hours
- Trash and garbage in yards and streets
- Cars and traffic along major routes
- Odors (smells) from gases in the air
- Bronchitis; asthma; sinusitis/sinus; itchy eyes; lungs
 - Made worse by cumulative irritants including pollution and other seasonal allergies
- Some people stay in their house to avoid air pollution
- Can't dig due to combustible soil
- Unable to enjoy nature (can't swim in Brandywine); quality of life considerably diminished
- Can't hang clothes outside to dry (odor taints clothing)

Sources of Environmental Pollution

- Facilities in the area
 - Recycling center
 - Edgewood Plant
 - Diamond Materials
 - Industrial plants
- Marine Terminal 5
- Development/buildings and other things being built in the area
- Residents dumping trash and littering (and no fines for trash)
- Cars; diesel truck emissions
- Delaware City air pollution traveling to area

Interventions to Address Environmental Pollution

- “What can we do” (normalization of environmental pollution)
- Area could be cleaner; seems “out of control”
- Fewer cars
- People need money to pay for waste removal
- Not always sure what to do; want to learn more on what can be done
- Enforce clean air laws; more regulations on industry
 - Tried getting plant (i.e., Diamond Materials) closed and a barrier for dust but was not successful; cover dirt and other materials to prevent from blowing
 - Spraying materials piles only to have it dry out and blow into community
 - It shouldn’t be in a residential community
- Move the Trinity Trucking Facility
- Some residents want to move; one owns home and wants to pass it on to family, but concerned now with the environmental issues
- DNREC has done some cleanup in individual yards

Interest in Mobile Unit, Testing, and Results

- Most respondents (20) expressed interest in the unit and the testing results
 - Only a few (5) expressed little interest
- Mobile unit important; move to locations where there is dust
- Residents (or people in general?) can only do so much, so more testing needed
- Can truck move around regularly?
- Mobile unit is coming in late, after many years of dealing with these issues
- Pamphlets to disseminate information in the community, but email and mail were most frequent responses; some get alerts; some said telephone; some said website

General Themes

In all, most people didn’t spend a great deal of time talking to us, but several were very emphatic about the issues and sharing their experiences. This is common in communities with environmental justice issues, as the experiences of many residents with environmental pollution become normalized, with a handful of residents becoming charismatic leaders of community movements or at least more civically engaged to address the issues. Getting more community members involved and maintaining that involvement is a challenge, but the DAQ can try to increase community engagement through a continued presence in the community and outreach, as well as making a strong effort to disseminate results from the mobile unit to all members of the community whenever they are available. This will not only strengthen the relationship between the state and the community members, but enhance the authenticity of the efforts by the DAQ to help improve the community’s quality of life and the health of the residents.

In general, people believe they live in an area with environmental hazards of various types, and that these hazards impact their quality of life, health, and the lives of their fellow residents and children. The DAQ should spend considerable time studying residents’ shared experiences because this will help to reveal how the different communities come to collectively construct their understanding of their environmental risks. Many of the embodied experiences of residents show that they must incorporate and adapt to local environmental hazards in their routine lives, including hanging clothes to dry, staying inside, and cleaning their cars.

Some respondents expressed the belief that things are getting worse, but also that they have had these burdens for quite some time. A general theme to help address these issues involved stricter regulations and enforcement of environmental laws on the industries they understand as the major sources of pollution, in addition to somehow lessening the burden of traffic in the area, which causes air quality and noise pollution issues. Thus, working with community members to better understand their beliefs about exposure pathways and the dosage of pollution that they experience can help bring both parties (i.e., community members and local, city, and state officials) to a more similar understanding, which can lead to practical mitigation strategies.

Lastly, two major components of any community health/environmental health assessment include a thorough and detailed understanding of community cohesion, combined with a solid grasp of *recreancy*.² Lynn (2017) defines recreancy as “[arising] when it is believed that institutional actors (including public sector agencies and their employees) are not carrying out their responsibilities at a level commensurate with the level of societal trust the institutional actors possess” (pp.321-322). During our brief field survey, most people did not take the opportunity to discuss how they felt about living in the community in positive ways, nor did they directly discuss collective efficacy to address these problems in positive ways. Though our questions were framed from a “concerns” perspective, our impression from this work is that the community cohesion and collective efficacy to address environmental burdens is weak, though we have heard anecdotal evidence in other settings that this has partly to do with a lack of outreach about these issues. We strongly encourage the DAQ to look deeply into how community ties and community cohesion impact resident beliefs about the possibilities to address air quality and other environmental issues in the area. Furthermore, we would also encourage the DAQ to enhance the level of faith the community has for it to work on their behalf, as some residents expressed the belief that only now are state agencies beginning to address these issues, even though the various communities’ experiences have been known about for some time.

² Lynn, Kevin. 2017. Rising Recreancy: Flood Control and Community Relocation in Houston, TX, from an Environmental Justice Perspective.” *Local Environment* 22(3):321-334.

Row ID	Page #	Name	Location	Justification
1	58	Neighborhood connections pathway network	Study area	This project will construct neighborhood pathway networks on both the east and west sides of SR 9. The networks will build on and expand the Tri-Park Paths project by New Castle County. The pathway networks will provide pedestrian and bicycle accessible trails to connect the now largely disconnected suburban communities that comprise the SR 9 corridor. Active SRTS Programs (McCullough and Eisenburg) and an active TAP Project (to be initially situated around the new library) may help construct elements of this network.
2	62	Garasches Ln to Terminal Ave Extension Concept Study	NW of Terminal Ave into Wilmington	This project would extend Garasches Ln to SR 9 near Terminal Ave to build a more direct trucking route. It is aimed at supporting light industrial activity along Garasches Ln via an enhanced connection to I-495 and the port.
3	62	Pigeon Point Rd Extension w/new I-295 interchange Concept Study	Pigeon Point Rd from Lambson Ln to Lukens Dr	This project would extend Pigeon Point Rd south from Lambson Ln to Lukens Dr in the vicinity of the rail line. A new interchange with I-295 will also be built along this road. The project would improve freight efficiency by creating a backbone route for trucks serving the port and surrounding industry and commerce. It would allow for a more comfortable expansion of the port southwards. With this route in place, trucks should also be less compelled to utilize restricted neighborhood roads.
4	62	Comprehensive truck signage	Study area	This project would comprehensively assess and better sign existing truck restrictions to help keep big trucks off neighborhood streets. It would also ensure that those restrictions are reflected on truck GPS directions.
5	62	Illegal truck movement outreach and enforcement	Study area	This project will provide general education, outreach, and enforcement of truck restrictions to truck drivers and the businesses they serve. The effort is aimed at reducing the amount of big trucks that utilize restricted neighborhood streets.
6	62	Inventory of diesel activity at Port of Wilmington	Port of Wilmington	This project will inventory all diesel engines and activity at and around the Port of Wilmington. It will build on an inventory begun by DNREC and the South Wilmington Planning Network. Such an inventory is useful for identifying potential recipients of grants to replace aged diesel equipment, which are responsible for air emissions and health problems.
7	62	Overnight electrified parking for port-related trucks	Terminal Ave near I-495 interchange	This project would construct a new parking facility for trucks serving the Port of Wilmington and surrounding commerce and industry. The site would have electric plug-in capabilities, so trucks could continue to run without idling. The project would support the more efficient movement of freight, provide needed extra truck parking at the port, and reduce diesel emissions. A public or private venture could be pursued. Two potential locations along Terminal Avenue were identified in WILMAPCO's 2013 Port Parking Study.
8	67	Terminal Avenue at SR 9 Roundabout	SR 9 at Terminal Ave	This project rebuilds Terminal Ave at SR 9 as a single lane roundabout. The feature would act as a gateway to the corridor while helping slow traffic, enhance traffic safety, and support truck movements. The roundabout design can be modified for a connection to Garasches Ln. With the full SR 9 road diet in place, this project will have almost no impact on traffic LOS in modeled 2036 conditions.
9	68	SR 9 Road Diet/Streetscape: Rogers Rd to Terminal Ave	SR 9 from Rogers Rd to Terminal Ave	This project will provide traffic calming, beautification, green infrastructure, and enhanced pedestrian and bicycle connectivity and safety on SR 9 from Rogers Rd to Terminal Ave. The preferred cross-section would reduce travel lanes to one northbound and one southbound with a center turn lane. Saved ROW will be used for a breakdown/bus pullover/parking shoulder, buffered bike lanes, and wider sidewalks around existing obstacles. Street trees will be added to screen existing industry and capture dust pollution. With the full SR 9 road diet in place, this project will have almost no impact on traffic LOS in modeled 2036 conditions.
10	71	Rogers Rd at SR 9 Intersection Rebuild	SR 9 at Rogers Rd	This project rebuilds the intersections of Rogers Rd and Sutton Ln with SR 9. The feature removes the existing slip lanes. They are replaced with to offset T- intersections - one at Rogers Rd and one at Sutton Rd. Saved ROW on the southwest corner is converted to a small park with a connecting trail. Expanded bus stops are included in the design, along with enhanced pedestrian crossings. The project will enhance traffic safety, beautify the location, add green space, screen industry, enhance pedestrian and bicycle connectivity, all the while maintaining acceptable traffic flow. With the full SR 9 road diet in place, this project will have no impact on traffic LOS in modeled 2036 conditions.

11	72	SR 9 Road Diet/Streetscape: Lambson Ln to Rogers Rd	SR 9 from Lambson Ln to Rogers Rd	This project provides traffic calming, beautification, green infrastructure, and enhanced pedestrian and bicycle connectivity and safety on SR 9 from Lambson Ln to Rogers Rd. The preferred cross-section reduces travel lanes to one northbound and one southbound. Saved ROW is used for bioretention swaths, dedicated bus pullover lanes, separated bicycle lanes, wider sidewalk at existing obstacles, and new sidewalk on the east side of SR 9. Street trees are added along with pedestrian scaled lighting. The bioretention area (with a mountable curb) doubles as an emergency breakdown lane. With the full SR 9 road diet in place, this project will have almost no impact on traffic LOS in modeled 2036 conditions.
12	76	Memorial Drive at SR 9 Roundabout	SR 9 at Memorial Dr	This project rebuilds Memorial Dr at SR 9 as a hybrid single-double lane roundabout. The feature would act as a gateway to the corridor, while helping slow traffic, enhance traffic safety, support truck movements, and improve traffic flow. The feature enables the construction of the I-295 interchange center lane pathway. With the full SR 9 road diet in place, this project will have a positive impact on traffic LOS in modeled 2036 conditions.
13	78	SR 9 Road Diet/Streetcape: Memorial Dr to Lambson Ln	SR 9 from Memorial Dr to Lambson Ln	This project provides traffic calming, beautification, green infrastructure, and enhanced pedestrian and bicycle connectivity on SR 9 from Memorial Dr to Lambson Ln. The preferred cross-section maintains two travel lanes in each direction, but eliminates turning lanes and the shoulders. Saved ROW is converted to separated bicycle lanes, wider sidewalk at existing obstacles, and a bioretention area with trees and pedestrian scaled lighting. With the full SR 9 road diet in place, this project will have almost no impact on traffic LOS in modeled 2036 conditions.
14	80	Memorial Drive Road Diet: Interim Build	Memorial Dr from SR 9 to US 13	This project provides traffic calming and enhanced pedestrian and bicycle connectivity and safety along Memorial Drive. This relatively inexpensive interim build project reconfigures Memorial Drive from two lanes in each direction to one lane in each direction. The hardscape center median with street lighting is maintained. The parking shoulder is largely maintained as well, though some parking at key locations may need to be removed. Saved ROW will be used for on street bicycle lanes. Pedestrian safety intersection enhancements at Karlyn Dr and Bizarre Dr, hotspots for student crossings, are also proposed. This interim build slightly worsens traffic conditions in modeled 2036 conditions compared to the no build, but could be an inexpensive first step towards the full build.
15	80	KarylIn Drive at Memorial Drive Intersection Rebuild	Memorial Dr at Karlyn Dr	This project features pedestrian and bicycle improvements and green space additions to the intersection of Karlyn Dr at Memorial Dr. Working in tandem with the full build of the Memorial Drive road diet, the project will improve safety and connectivity for people walking and bicycling. Bumpouts with green space are added at each corner of the intersection; pedestrian crosswalks are marked and include a center refuge island; a bicycle crosswalk is included along Memorial Drive. An active SRTS Program at McCullough Middle School may help construct elements of this project.
16	80	Memorial Drive Road Diet: Full Build	Memorial Dr from SR 9 to US 13	This project provides traffic calming, beautification, green infrastructure and enhanced pedestrian and bicycle connectivity and safety along Memorial Drive. This preferred full build project reconfigures Memorial Drive from two lanes in each direction to one lane in each direction. The hardscape center median with street lighting is removed. A center turn lane is placed here instead. Street lighting is relocated to the sides of the roadway. The parking shoulder is reconfigured as bicycle lanes buffered by a mix of parking spots and street trees. Pedestrian safety intersection enhancements at Karlyn Dr and Bizarre Dr, hotspots for student crossings, are also proposed. The full build maintains better traffic flow in modeled 2036 conditions than the interim build, and even improves upon no build conditions through that year.
17	82	Multiuse Center Lane Pathway: I-295 at SR 9	SR 9 from Cherry Ln to Memorial Dr	This project provides traffic calming, beautification, green infrastructure and enhanced pedestrian and bicycle connectivity and safety along SR 9 at the I-295 interchange. ROW along SR 9 as it passes over I-295 is reorganized. Motorized travel lands are shifted towards the curb to provide room for a center lane multiuse pathway, to be buffered by green space and pedestrian lighting. Access points to the pathway are roundabouts at Memorial Dr and Cherry Ln. Street trees are added in green spaces near existing ramps. With the full SR 9 road diet in place, this project will correspond with a positive impact on traffic LOS in modeled 2036 conditions.

18	82	Cherry Ln at SR 9 Roundabout	SR 9 at Cherry Ln	<p>This project rebuilds Cherry Ln at SR 9 as a hybrid single-double lane roundabout. The feature would act as a gateway to the corridor, while helping slow traffic, enhance traffic safety, support truck movements, and improve traffic flow. The feature enables the construction of the I-295 interchange center lane pathway. With the full SR 9 road diet in place, this project will have a positive impact on traffic LOS in modeled 2036 conditions.</p>
19	84	Stamm Blvd at SR 9 Intersection Rebuild	SR 9 at Stamm Blvd	<p>This project rebuilds the intersection of Stamm Blvd at SR 9. Unnecessary, extra pavement is reorganized. Enhancements include improved walking connections from the eastside frontage road. Green space is added to provide a buffer for people walking and biking. This project will improve traffic safety, enhance pedestrian and bicycle connectivity and safety, add green space and beautify the corridor. With the full SR 9 road diet in place, this project will have a slightly negatively impact on traffic LOS in modeled 2036 conditions though they remain entirely acceptable for an urbanized area. Further traffic analysis is needed to model the impacts of proposed lane reductions and reorganizations in this stretch of the corridor.</p>
20	86	SR 9 Road Diet/Streetcape: Stamm Blvd to Landers Ln	SR 9 from Stamm Blvd to Landers Ln	<p>This project provides traffic calming, beautification, green infrastructure, and enhanced pedestrian and bicycle connectivity on SR 9 from Stamm Blvd to Landers Ln. The project will remove one travel lane in each direction, remove on street parking, and reduce Kiloran Dr from two to one lanes. Saved ROW is converted to separated bicycle lanes, wider sidewalks, a new sidewalk on the west side of SR 9, dedicated bus pullover space, a bioretention swale with street trees, and pedestrian scaled lighting. Further traffic analysis is needed to model the impacts of proposed lane reductions and reorganizations here.</p>