UNIVERSITY OF DELAWARE
COOPERATIVE EXTENSION

Route 9 Corridor Needs Assessment

Gina Crist , Sarah Goldring , Hannah Sherman
May 2021

Background

The Route 9 Corridor is located between the cities of Wilmington and New Castle, Delaware. It is a community that is in need of improved access to various social determinants of health. These include jobs, healthy foods, recreation, community services, education and affordable housing; mixed-use and mixed- income redevelopment; mitigation of environmental and health concerns; examination of land uses and recommended zoning adjustments; and roadway improvements that promote alternative transportation and manage traffic. This community is considered at-risk based on multiple data indicators surrounding income and health shown in Table 1 (See Appendix A).

The Route 9 Corridor Master Plan identifies the best reinvestment and redevelopment strategies for the Route 9 Corridor. This Master Plan was requested by New Castle County and funded and executed by the Wilmington Area Planning Council (WILMAPCO) as of May 2017. The Master Plan was developed by a steering committee comprised of civic leaders, government representatives, nonprofits and others. Following its adoption, this group morphed into a Monitoring Committee. The Monitoring Committee aims to oversee and fulfill recommendations in the Master Plan, as well as to tackle other community needs as they arise. Three subcommittees -– Health, Local Hire, and Outreach – also hold regular meetings to perform more detailed work in support of the Monitoring Committee. For more information, visit: www.wilmapco.org/route9.

The Health Subcommittee has established an important dialogue between area civic leaders and local government about environmental impacts to community health. Under the leadership of the University of Delaware's Cooperative Extension, the Route 9 Health Assessment has helped set the stage for an Action Plan. The mission of the Health Subcommittee is to improve health outcomes for residents of the Route 9 corridor, principally by understanding and working to address the area's social determinants of health concerns.

The Local Hire Subcommittee is seeking to promote the training and hiring of local people during the construction of projects associated with the Master Plan, along with the general promotion of workforce development among residents of the Route 9 corridor. The Outreach Subcommittee will help continue to get the word out about the Master Plan.

Data has been previously collected within the Route 9 corridor through survey collection. The Route 9 Needs Assessment was created based on data collected in two previous surveys: New Castle Prevention Coalition (NCPC) data and Paths Plan data. The New Castle Prevention Coalition (NCPC) data mainly provided data regarding crime and safety, while the Path Plan data provided insight on the environment issues in the Route 9 corridor.

Purpose

Much of the secondary data that exists is collected at the zip code level and not representative of the actual corridor. There have been efforts over the past three years to gather community level quantitative data to get a better understanding of the needs. The purpose of this needs assessment was to bridge the gap between the information existing and the community member's perceptions of health and well-being as it relates to social determinant

issues. The information gathered is an attempt to create better guided interventions to maximize the health, safety, and economic well-being for all residents in the community. The initial purpose was to gather as much qualitative data as possible to help better understand the root causes of the current quantitative data.

Methodology

The project began with reviewing a community health profile which was used to decide the largest determinants of health as defined as those that are impacting the corridor are at greater risk than state average numbers. From there, the three main concerns (poverty, crime, and environmental concern) became the essential focus for the needs assessment. Due to COVID-19 constraints, the original plan to do door-to-door community-based surveying needed to be adapted. In conjunction with the Route 9 Health Subcommittee the research team decided to move to a more qualitative interview process first, and will be following up with a secondary data collection that will involve a larger sampling and more community-based methods.

In order to retrieve qualitative data, an interview guide was created to better understand the perceptions of community residents related to the numbers surrounding these concerns. By defining the goal of bridging the gap between quantitative and qualitative data, the interview was structured with open-ended questions that would likely be ignored on surveys.

Borrowing methods from community based participatory research, the interview process was created. The key informant, Ms. Dora Williams from New Castle Prevention Coalition, was identified by the subcommittee and assisted with outreach. Ms. Williams aimed for and got an even sampling of residents across different neighborhoods along the corridor. The interviews were completed by community members and the information received was then used to compare what was known from pre-existing data to what is perceived by community members themselves.

The data was then coded to determine the most recurring concerns from community members. From there, the main concerns were discussed with the pre-existing data to determine interventions to be implemented.

Results

Demographics

A total of 104 interviews were conducted. Of the 104 surveys conducted, 78 were female, 25 were male, and 1 preferred not to answer. In regards to gender less than 25% of survey respondents were male. This is important to note in the context of gender-based health perceptions/needs and how this hard skew may influence final results. There were a wide variety of ages surveyed ranging from 18-65+, which can be seen in Chart 1 (See Appendix B). Similarly, the ethnicities surveyed were reflective of the demographics in Route 9, which can be seen in Chart 2 (See Appendix B). Each neighborhood had between 4-7 surveys conducted, with the majority of surveyees living in each neighborhood over 10 years, as seen in Chart 3 (See Appendix B).

Community Health Questions

After the demographics were collected, survey questions centered around participant perceptions on specific subjects. To obtain a general understanding of the quality of life in the community, the survey asked "on a scale of 1-10 (1 being the least satisfied, 10 being the most satisfied) how do you feel your community supports your quality of life on a daily basis". Respondents averaged a score of 6.118 out of 10. The community members were asked if they saw an opportunity for change, which resulted in a mixed response between yes and no. The biggest reason for supporting an opportunity for change included neighborhood communication improving through working together and supporting each other. Opposingly, the biggest reasons for no opportunity for change included lack of care, change and support.

Community members were then asked general questions about stress. The three most recurring causes of stress included COVID-19/the pandemic, work and guns/shootings. When it came to specific questions regarding COVID-19, the majority of interviewees said yes to having adequate testing, having access to all of the social services needed and feeling as though their community members are adhering to the CDC guidelines of mask wearing/social distancing as seen in Table 2 (See Appendix A).

Environmental Issues were asked on a scale of 1-5 (1 being of least concern and 5 being of most concern). All four issues (Air Quality, Soil, Pollution and Roadways) averaged in the 3's with pollution (3.7) and roadways (3.7) being of more concern, and air quality (3.4) and soil (3.2) being of less concern.

When asking community members if in the past year they have felt as though they could afford everything they needed to live, 55.4% said yes while 44.6% said no. From those who said no the majority identified themselves as "low income". In regards to racism, 54.6% said they do not believe racism plays a role in their community, while 45.4% believe it does. For safety, community members were asked on a scale of 1-5 (1 being the least safe, 5 being the most safe) how they felt. The average was 3.6. The exact breakdown can be seen in Table 3 (See Appendix A).

Discussion:

There were four common themes found within this health assessment that aligned with previous research. The first theme, neighborhood cohesion, alluded to the lack of community within the Route 9 corridor. This theme talks about the neighborhoods connection to quality of life, its relationship with income, and racism conversations and considerations. The second theme, air quality and environmental concerns, discusses the built environment and the effects of pollution on the community. The third theme, safety, provided information on the need for substance use prevention, better environmental safety such as street lights, and the relationship between violence and the feeling of danger. Lastly, the fourth theme, additional considerations, provided data on mental health including stress management, connection to resources and family support. Additionally, this provided data on an ongoing topic that has no data previously collected, COVID-19. This data included the need to continue vaccine education and testing, the support for employment and skill building, looking into food access needs, and the relationship between the pandemic and mental health.

Neighborhood Cohesion

As a community, Route 9 is looking for more neighborhood cohesion in the aspect of opportunity for change. Some cohesion opportunities they suggested were working together to speak up on issues within their neighborhoods, keeping their neighborhoods clean and creating a more inclusive community. These community members are hopeful that if neighbors begin to work together and communicate that their community can change for the better. It is essential that change begins to happen in Route 9 because a reasonable number of community members are losing hope in the representatives talking over them and turning a deaf ear to their requests. With these improvements being put into action, it is possible that the quality of life within these communities could be improved.

The data showed that community members in Route 9 may not view their quality of life as perfect or miserable, but rather somewhere in between. The area found to be most supportive of quality of life was spiritual/church, while the area found to be least supportive of quality of life was social/neighbors. The goal is to involve trusted resources, such as faith based organizations, when implementing interventions. The highest average was for the age group 18-24 (7.1) and the lowest average was for the age group 35-44 (5.3). However, there was no correlation found between quality of life scores and age range.

An interesting finding collected from the affordability data was a handful of community members who self-identified as low-income. Low income describes a person who earns less than, or at least not significantly more than, the poverty level. The biggest concern regarding not being able to afford everything needed to live within the past year was not jobs, but the fact that the jobs these individuals have are not paying them enough to live. Low income persons often have low job security and are strongly correlated with low education levels. This information helps to show where some sectors of poverty are coming from and therefore where there can be improvement.

The racism data showed that of the White population that answered this question, 70% answered no and 30% answered yes. Of the Black/African American population that answered this question, 52% answered no and 48% answered yes. In the communities of Penn Circles and Rosegate, all the interviewees said yes. In the communities of Swanwyck Estates and Hazeldell, all the interviewees from these communities answered no. The population in Swanwyck and other communities south of I-295 are majority white, while the population in Rosegate and most neighborhoods north of I-295 is majority African American/Black. There was no correlation found between racism answers and age group.

Environmental Concern

The most common concern regarding pollution and roadways included landlords needing to have owners/renters keep homes clean. The main concern with pollution was trash. This concern included too much trash on the roads, the odor of trash in the morning, and rodents around outdoor trash. Landlords were a common concern with not keeping up with the

houses they were renting and not holding renters accountable for cleanliness. This issue plays into the neighborhood cohesion, since neighbors are resenting each other due to pollution.

For air quality, the biggest concern revolved around the CRODA chemical plant. CRODA recently received a lot of attention due to their recent massive leak, shutting down I-295. Along with air quality, CRODA may be perceived as a safety issue – feeling unsafe next to a facility with dangerous chemicals that could experience uncontrolled releases. Nemours Analysis of Colonial School District Data (shared with the Health Subcommittee in January 2020) shows that 79,827 (10.6%) of Delaware children and adults have current Asthma. Eden Park Community Ambient Air Quality Study data talks about particulate matter pollution which includes sources such as roads, construction sites, fires, smokestacks, automobiles and trucks, industries and fields. This study documented a high localized presence of course particulate matter (>PM10), but not fine particulate matter (PM2.5). There's an important distinction between the two as fine particulates are much more dangerous. Course particulates are considered a welfare issue, but not a medical one by the state. These pollutants reported negative effects on health including increased respiratory problems, such as irritation of the airways, coughing or difficulty breathing, aggravated asthma, premature death in people with heart or lung disease, and nonfatal heart attacks and irregular heartbeat. In order to improve air quality, this study suggests a collaboration between EPA and state air quality agencies to reduce particulate matter pollution. The Master Plan aims to reduce localized exposure to particulates through truck re-routings and separating industry from residential. The Health Subcommittee also, early on, was working on better street cleaning and drain cleanings which should be continued with the action plan to address air quality.

Safety

For safety data, a common theme across interviews was drugs and drug prevention. A common factor of feeling unsafe throughout the interviews were neighborhood drug dealers. Data from New Castle Prevention Coalition (NCPC) Community Needs Assessment shows that 70.6% of those surveyed believe Marijuna is the most popular drug in their neighborhood. Marijuana can be a controversial topic within a community due to disagreements on legalization. Only 37.9% of those surveyed wanted Marijuana legalized, 34.8% did not and 28.6% stood neutral on the subject. Those interviewed agreed the best way to curb both illicit drug use and prescription drug use is to create more jobs, with more recreation coming in second and more police coming in third.

The health assessment showed that interventions are needed to enhance community safety, such as lack of lighting. Community members voiced their concern that one of their biggest factors of feeling unsafe was due to improper lighting throughout the community, especially at night. Data from New Castle Prevention Coalition (NCPC) Community Needs Assessment shows that 52.2% interviewed said there was sparse lighting, 14.5% said no lighting, and 33.3% said there was highly visible lighting.

The most common fear in regards to danger came from shootings and crime. Shootings were reported as the biggest reason for feeling unsafe, the biggest reason for knowing someone in the community who passed away unexpectedly, and one of the most written in responses for a health topic that wasn't discussed but important to everyday health and wellbeing. Some

community members voiced that gun violence and shootings make them feel as if they "can't go anywhere alone" and that there is a "lack of police presence" involved in the situations. There was no correlation found between gender and safety, age and safety or neighborhood and safety.

WILMAPCO's Rt. 9 Path Plan provides data on why individuals don't walk/ride a bike for transportation, with lack of safety being the second most common reason for walking and fourth reason for riding a bike. The question "Are there any destinations you would like to bike or walk to, if there was a safer way to do so?" was asked, and the number one answer was Route 9. Route 9 also received the greatest number of mentions when asked which roads/intersections present the greatest safety concerns.

Additional Considerations

In regards to stress and the importance of mental health this community is in need of stress management, connection to resources, and family support. As COVID continues, ongoing work and education is needed. Although the majority of the community members said yes to having adequate testing, having access to all of the social services needed and feeling as though their community members are adhering to the CDC guidelines of mask wearing/social distancing, there were communities who did not agree. In 7-3 New Castle County (NCC) Covid Data2 , out of the 15,462 individuals tested 9,897 were white, 3,910 were black and 1,655 were hispanic in a minority dominated area. It is important as a community to start or continue promoting vaccine education, support for employment/skill building, and look more into any food access needs. In regards to immunization, the vaccination rate in the community is low. 19720 is among the lowest zip codes fully vaccinated in New Castle County as of May 31 2021 (40% vs the 50% average).

Conclusion

This health assessment along with previously completed surveys provided information about the issues present in the communities. Specifically, this assessment provided qualitative information on quality of life indicators, lack of neighborhood cohesion, concerns regarding the built environment, the lack of safety and the effects of COVID-19 on mental health. This qualitative information allows the committees involved in the Route 9 Master Plan to better understand the community member's perceptions of health and well-being as it relates to social determinant issues rather than reading previous quantitative data on these issues. The Route 9 community voiced where they lack what they need and where they want to see change being made.

While this assessment has provided us with much information, there are still some gaps in data that we are looking into. Data has been requested from the Delaware Division of Public Health regarding air quality, violence, and infant mortality at the local level on MHC. Additionally, cancer risk at the tract or below level has been requested.

The next step is to do an action plan based on the findings. These interventions will be brought to the Health Subcommittee to discuss. From there, community feedback will be

received on the potential solutions to see what they feel would make the most change. This will initiate the plan processing for implementing these interventions in the Route 9 Corridor.

References

Mirzakhalili, Ali. Eden Park Community Ambient Air Quality Study: *Preliminary Data Evaluation*. [Powerpoint Presentation]

Policy Map: Community Profile Report by Custom Region: Route 9 Corridor for areas in New Castle County

Rattay, K. (2019). Community Health Profile [Powerpoint Presentation]. Healthy Communities Delaware

Thompson, J (2021). Route 9 Paths Plan [Powerpoint Presentation]. WILMAPCO. Health Subcommittee

Route 9 Corridor Master Plan. WILMAPCO. http://www.wilmapco.org/route9/ May 2017.

New Castle Prevention Coalition Community Needs Assessment

7-3 New Castle County Castle COVID Data2

Appendix A (Rattay, 2019)

TABLE 1

	State of Delaware	Route 9 Corridor
Poverty (%)	<12	18.0-33.1
Median Household Income ($)	63,063	45,319-61,902
Unemployment Rate (%)	4.8	4.9-8.4
Without HS Diploma (%)	11	13.0-23.4
Life Expectancy (Years)	78.5	70.1-77.5
Infant Mortality (age adjusted rate per 10,000)	6.6	7.5
Asthma ER Visits (in 1 month)	60	75
Homicide Rate (age adjusted rate per 100,000)	7.3	8.8
Accidental Deaths (age adjusted rate per 100,000)	67.9	77.7

TABLE 2

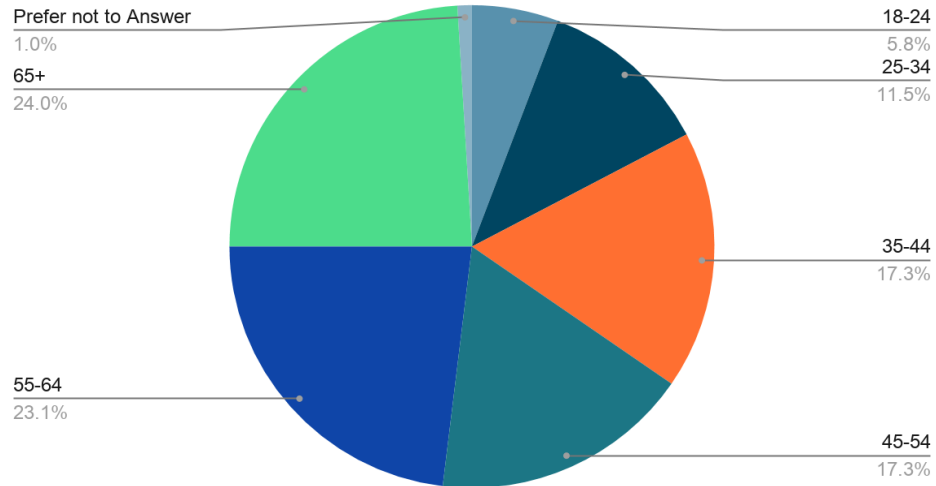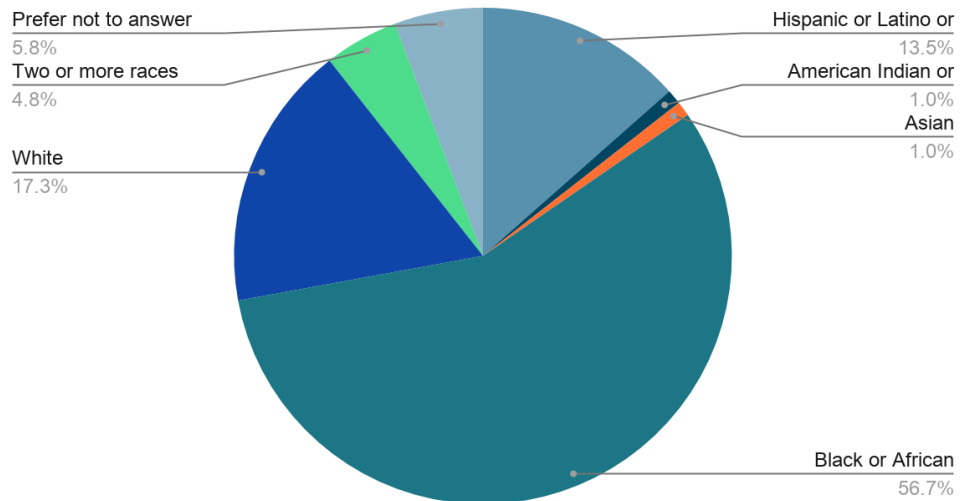|	Yes	No
Do you feel as though you have adequate testing?	68	24
Do you feel as though you had access to all of the social services you needed?	61	32
Do you feel your community members are adhering to the CDC guidelines of mask wearing/social distancing?	69	25

TABLE 3

	1	2	3	4	5
On a scale of 1-5 (1 being the least safe, 5 being the most safe) how do you feel?	9	4	17	18	23

Appendix B: Survey Respondent Demographics for the Health Assessment

CHART 1: Age

Prefer not to Answer 1.0%
65+ 24.0%
55-64 23.1%
18-24 5.8%
25-34 11.5%
35-44 17.3%
45-54 17.3%

CHART 2: Race/ethnicity

Prefer not to answer 5.8%
Two or more races 4.8%
White 17.3%
Hispanic or Latino or 13.5%
American Indian or 1.0%
Asian 1.0%
Black or African 56.7%

CHART 3: Time Living along Rt. 9

<6 months
4.2%

6 months- 1 year
7.4%

2-5 years
12.6%

6-10 years
14.7%

10+ years
61.1%