

Redding Consortium for Educational Equity

Social Drivers of Health and Education Landscape Analysis Discovery Phase Report

March 2025



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Prepared by: Trent Sharp, Ph.D., Visha Patel, Lillianna Carrera, Ph.D., Jasmine Howard, Nastaran Pourebrahim, Ph.D., Caitlin Deal, Emma Stein



Contents

- Executive Summary..... 1
- Overview: Goals for Landscape Analysis4
- Overview: Landscape Analysis Phases, Timeline, and Management5
- Overview: Social Drivers of Health and Education..... 7
- Discovery Phase Findings..... 9
 - Spatial Data Review 10
 - Phase 2 Research Questions 12
 - Phase 2 Data Collection 13
 - Benefit to the Redding Consortium Subcommittees 14
 - Interviewees Emphasized the Connection Between Student Mobility and Housing 15
 - Prior Examinations of Factors Influencing Housing Access 16
 - Phase 2 Research Questions 16
 - Phase 2 Data Collection 16
 - Benefit to the Redding Consortium Subcommittees 17
 - Interviewees Emphasized the Critical Importance of Community Centers 18
 - Phase 2 Research Questions 18
 - Phase 2 Data Collection 19
 - Benefit to the Redding Consortium Subcommittees 20
 - Wilmington Investment in Wraparound Supports 20
 - Phase 2 Research Questions 23
 - Phase 2 Data Collection 23
 - Benefit to the Redding Consortium Subcommittees 23
 - A Rich History of Participatory Action Research in Wilmington..... 24
 - Benefit to the Redding Consortium Subcommittees 24
- Conclusion 24
- References..... 25

Exhibits

Exhibit 1. Discovery phase data collection overview.....	4
Exhibit 2. Overview of study timeline.....	6
Exhibit 3. Landscape analysis project teams	6
Exhibit 4. Social driver priority outcomes for landscape analysis	7
Exhibit 5. Stipulations informed by landscape analysis	8
Exhibit 6. Distribution of student population in Wilmington.....	11
Exhibit 7. Food insecurity and highest student quartiles	11
Exhibit 8. No vehicle and highest student quartiles	12
Exhibit 9. Rental housing and highest student quartiles.....	12
Exhibit 10. High student concentration census tracts compared to citywide averages	12
Exhibit 11. Approach to Spatial Analysis.....	14
Exhibit 12. Process for measuring community center accessibility	19
Exhibit 13. ZIP codes highlighted in recent reports	21
Exhibit 14. Crosswalk of initiatives across Wilmington CDCs.....	22

Executive Summary

The Redding Consortium for Educational Equity (Redding Consortium) is tasked with proposing a redistricting plan that will improve educational opportunities and outcomes for children living in the city of Wilmington and northern New Castle County. The American Institutes for Research® (AIR®) is honored to support this critical work through a Social Drivers of Health and Education Landscape Analysis that will inform the Redding Consortium's rationale for redistricting and provide recommendations for better supporting students and families, regardless of district boundaries changes. The following summary highlights the key findings from the discovery phase (November 2024 to March 2025) and how we propose to address these findings in the remainder of the landscape analysis.

Finding 1: In order to provide a stronger rationale for redistricting decisions and more impactful supports for students and families, the RCEE subcommittees require (a) a more precise understanding of how students and families experience different combinations of social drivers in different neighborhoods across Wilmington and (b) stronger evidence for how these social drivers affect health and education opportunities.

To address this finding, AIR seeks to address the following research questions in Phase 2:

- How do combinations of social drivers vary by neighborhood?
- What is the relationship between social drivers and schools attended?
- How do school options and travel time vary based on exposure to positive and negative social drivers?
- How do students, parents, guardians, caregivers, and teachers describe the impact of social drivers on education and school choices, and how do experiences vary by neighborhood?
- How does access to high-performing schools vary across census tracts, and how do reassignment scenarios affect students' access and opportunities?

AIR will use the following approaches to answer these research questions:

- We will utilize available data to conduct spatial regression analyses examining which combinations of social drivers have statistically significant relationships with student experiences and outcomes (e.g. school attended, travel time, etc.).
- Using the findings from the spatial regressions, we will conduct interviews and focus groups across a mix of neighborhoods in Wilmington. This will include:
 - four focus groups with up to 32 high school students;
 - four parent, guardian, and caregiver focus groups with up to 32 parents of elementary, middle, and high school students; and
 - two focus groups with up to 16 school personnel.

Finding 2: The relationship between high student mobility and access to affordable housing surfaced as a priority issue across most interviews. Providing a stronger rationale for redistricting decisions and more impactful supports for students and families requires a more precise understanding of the scale and root causes of student mobility and the effect on health and education.

To address this finding, AIR seeks to address the following research questions in Phase 2:

- What are the cross-district and cross-school student mobility patterns for students who reside or have resided in Wilmington over the last 5 years?
- How do parents, guardians, and caregivers describe the root causes of student mobility and the impact on student health and education opportunities?

- How does student mobility affect the ability of schools and community-based organizations to serve students and families?

AIR will use the following approaches to answer these research questions:

- If the data are available, we will prepare a descriptive analysis of elementary school students who resided in Wilmington when they began kindergarten and how (if at all) their residences and schools changed over five years.
- Based on the findings from the spatial regressions, we will seek to learn more about how students and parents, guardians, and caregivers are experiencing social drivers across a mix of neighborhoods across Wilmington. We will conduct:
 - four focus groups with up to 32 parents, guardians, and caregivers of students who changed schools in the last two years;
 - two focus groups with up to 16 school personnel who support student transitions and well-being (e.g. counselors, social workers, Communities in Schools staff); and
 - two focus groups with up to 16 frontline staff from community centers or youth-serving community-based organizations.

Finding 3: Community centers have historically served as vital spaces for community connections and after-school enrichment and academic support, but due to changing civic priorities and funding availability many have closed or are struggling to stay open. Providing a stronger rationale for redistricting decisions and more impactful supports for students requires a more precise understanding of the broader landscape of out-of-school and after-school enrichment and supports and how varying access affects student experiences and outcomes.

To address this finding, AIR seeks to address the following research questions in Phase 2:

- Beyond community centers, what is the broader landscape for out-of-school and after-school enrichment and support?
- What services are provided? What services do they feel they need to provide but cannot?
- How does access vary by neighborhood?
- How do the experiences of youth vary based on their proximity or access to these organizations?
- What are the alternative spaces that are places of community, connection, and support for youth?

AIR will use the following approaches to answer these research questions:

- We will incorporate community center and after-school locations into spatial analyses.
- We will conduct:
 - five interviews with community center staff;
 - five interviews with other youth-serving organizations that we learn about through prior interviews or focus groups (e.g., churches)
 - two focus groups with up to 16 high school students who reside in neighborhoods with varied access to community centers and after school options; and
 - two focus groups with up to 16 elementary, middle, and high school parents, guardians, and caregivers who reside in neighborhoods with varied access to community centers and after school options.

Finding 4: Extensive investments were made across a wide variety of organizations in Wilmington to address social drivers. Providing a stronger rationale for redistricting decisions and more impactful supports for students requires a more precise understanding of the current state of collaboration between organizations and with districts, and how the current district configuration affects their ability to provide wraparound services.

To address this finding, AIR seeks to address the following research questions in Phase 2:

- Within the current landscape of organizations providing wraparound services to students and families, what are their priority service areas and what wraparound services do they provide?
- How does the current district configuration affect their ability to provide wraparound services?
- Where are areas of shared interest between organizations and opportunities for collective impact?

AIR will use the following approaches to answer these research questions:

- We will cross-reference organizations from previous community asset-mapping efforts, catalog services, and integrate these data into a spatial analysis.
- We will conduct 10 interviews or focus groups with administrators and frontline staff from CDCs or service organizations.

Finding 5: There is a notable and longstanding history of participatory action research (PAR) projects in Wilmington along with multiple organizations and academics that actively support PAR and youth-led PAR work. The landscape analysis will benefit from PAR, and AIR should partner with a local community-based organization and a team of student researchers to provide unique insights into how Redding Consortium can provide a stronger rationale for redistricting decisions and more impactful supports for students and their families.

To address this finding, AIR seeks to address the following research questions in Phase 2:

- The students leading the PAR study will create their own research questions based on what they think is important for the subcommittees to understand.

AIR will use the following approaches to answer these research questions:

- The students leading the PAR study will determine which data collection approaches are appropriate to answer the research questions they develop.

The research questions and data collection methods described above describe a starting point. As the landscape analysis unfolds, new themes and priorities will emerge, and AIR will collaborate with the Redding Consortium to adapt. With each adaptation, we will seek to more clearly describe the landscape of social drivers, provide stronger rationales for redistricting decisions, and recommend more impactful supports for students and families.

Overview: Goals for Landscape Analysis

Students and families in the city of Wilmington and northern New Castle County have inherited a school district configuration dating back to desegregation. More than 45 years later, the four-district system has proved to be a disjointed and ineffective model for Wilmington students and has failed to meaningfully transform educational opportunities and outcomes. Despite numerous commissions, task forces, and reports with rigorously researched redistricting recommendations, the four-district system remains.

Building off the lessons learned from prior redistricting efforts, the Redding Consortium for Educational Equity (the Redding Consortium) is now tasked with proposing a redistricting plan that will improve educational opportunities and outcomes for children living in the city of Wilmington and northern New Castle County. To support the redistricting planning, the Redding Consortium has partnered with the American Institutes for Research (AIR) to conduct a landscape analysis on social drivers of health and education (SDOHE), which will give the Redding Consortium’s three subcommittees (operations, fiscal, and community engagement) insights into the holistic experiences of students and their families beyond the school day and inform the vision and strategies for redistricting.

AIR began the landscape analysis (described in more detail below) with a discovery phase that included a comprehensive review of prior SDOHE and redistricting reports and plans, a high-level review of existing data on social drivers, and interviews with community and parent leaders. Exhibit 1 depicts the data collection activities in the discovery phase.

Exhibit 1. Discovery phase data collection overview



In one of the interviews, a community leader reflected on the last redistricting proposal (2016) by the Wilmington Education Improvement Commission (WEIC):

“. . . we go around the Brandywine River, everybody on that side of the Brandywine River goes to Brandywine. Everybody on this side goes to Red Clay. Well, it doesn't have nothing to do with academic capacity, resources allocation, any of that stuff. But we had reduced it to such a rudimentary hypothesis that it doesn't have a lot of weight to school districts, boards, all that kind of stuff.”

When asked about the implications for the Redding Consortium redistricting proposal and how the landscape analysis can contribute, they responded:

“I think really having a rationale . . . I think is important, and [the prior efforts] didn't do as good a job on that score.”

This recommendation aligns with statements from all other interview participants in the discovery phase, each of whom mentioned in their own way that redistricting is necessary but insufficient to address SDOHE and to improve opportunities and outcomes.

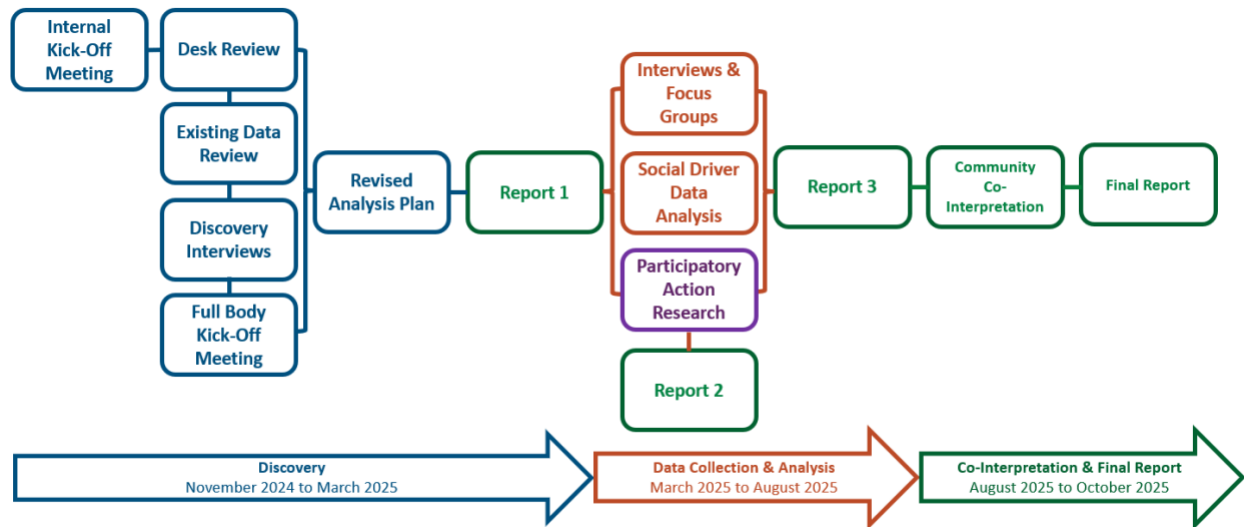
AIR has concluded the discovery phase with a clear feeling that the goal of the landscape analysis is to support the Redding Consortium subcommittee by contributing to a strong rationale for redistricting and to provide targeted recommendations for better supporting students and families, regardless of district boundaries changes.

The following sections describe the landscape analysis approach in more detail, followed by key takeaways from the discovery phase and implications for Phase 2 of the analysis.

Overview: Landscape Analysis Phases, Timeline, and Management

AIR designed the landscape analysis in three phases. Exhibit 2 provides an overview of the phases. As described in the previous section, the discovery phase (shown in **blue**) represents the foundation for the study by ensuring that our approach is informed by history and customized to the Wilmington context. Phase 2 (shown in **orange**) will be informed by the discovery phase findings and will include a mix of interviews and focus groups with a diverse blend of constituents, quantitative data analysis and spatial analysis (i.e., numeric data that can be measured), and participatory action research to be led—ideally—by students and parents, guardians, and caregivers who reside in Wilmington. The landscape analysis will conclude with a final reporting phase (shown in **green**) that will include a community co-interpretation event to review the findings and recommendations in the final report. **The co-interpretation event will be open to the public and AIR will collaborate with the community engagement subcommittee to ensure that the event is well publicized and accessible to students, parents, guardians, and caretakers.** Additional findings and recommendations provided by co-interpretation participants will be incorporated into the final report.

Exhibit 2. Overview of study timeline



Each phase in the needs assessment will be conducted in consultation and partnership with several cross-functional Redding Consortium project teams, described in Exhibit 3.

Exhibit 3. Landscape analysis project teams

Project team	Key activities	Members
Working Team	Ongoing check-ins and logistical support (scheduling, introductions, etc.)	<ul style="list-style-type: none"> • Raye Jones-Avery • Supt. Dorrell Green • Shelley Rouser • Paulette Gaddy • Deputy Sec. Cora Scott • Alaina Robinson
Extended Working Team	Regular progress updates, alignment and strategy support, and vetting content and approaches prior to the Redding Consortium full body or community engagement	<ul style="list-style-type: none"> • Senator Lockman • Rep. Chukwuocha • Raye Jones-Avery • Supt. Dorrell Green • Shelley Rouser • Paulette Gaddy • Deputy Sec. Cora Scott • Matt Denn • Alaina Robinson • Kelly Sherretz • Haley Burns • Subcommittee Co-Chairs (as needed)
Redding Consortium	Bimonthly progress updates and report presentations	<ul style="list-style-type: none"> • Redding Consortium Subcommittees • Redding Consortium Full Body

Together, these teams and AIR will collaborate to maintain a focus on social drivers in the redistricting planning process. Social drivers are defined in more detail in the following section.





Overview: Social Drivers of Health and Education

This landscape analysis is guided by the longstanding, well-established research based on the social determinants of health, which the Office of Disease Prevention and Health Promotion (ODPHP) defines as the “conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks” (ODPHP, n.d.). An equally robust body of education research literature highlights the impact of environmental conditions and place on education opportunities and outcomes (e.g., Aaronson et al., 2021).




However, the term “determinants” suggests that students and families have little agency in the face of challenging conditions and that nothing can be done to change the conditions.

This landscape analysis focuses on the social drivers of health and education. “Social drivers” are the mechanisms or forces that create the conditions in which people are born, grow, live, work, and age that affect health and education outcomes. A focus on drivers is action oriented and recognizes that conditions can be changed through policies and interventions. Exhibit 4 summarizes the outcomes that AIR will examine in this landscape analysis.

Exhibit 4. Social driver priority outcomes for landscape analysis¹

	<p>Connection to One Another and Resources</p> <ul style="list-style-type: none"> • Residential segregation (White, Black, Hispanic/Latino) • Percentage of students who are Limited English Proficient • Percentage of youth ages 16–19 enrolled in school or working • Access to cultural institutions and libraries • Proportion of population with computer and internet access
	<p>Routine and Accessible Health Care</p> <ul style="list-style-type: none"> • Proportion of population with health insurance • Proportion with diabetes/health issues • Access to medical, mental health, and dental professionals • Proportion of population with limited or uncertain access to food
	<p>Stable, Affordable Housing</p> <ul style="list-style-type: none"> • Percentage of renter-occupied housing • Proportion of population that spends more than 30% on housing • Proportion of population and students who are experiencing homelessness
	<p>Safe, accessible transit</p> <ul style="list-style-type: none"> • Walkability and bikeability of neighborhoods • Access to public transit • Average commute times • Percentage of population with one or more vehicles

¹ Compiled from U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (n.d.). Social determinants of health. Healthy People 2030. Retrieved March 19, 2025, from <https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health>; and Reardon, S. F., Fahle, E. M., & Kalogrides, D. (n.d.). The Educational Opportunity Project at Stanford University. Stanford University. Retrieved March 19, 2025, from <https://edopportunity.org/>

	<p>Access to Jobs and Fair Pay</p> <ul style="list-style-type: none"> • Labor force participation • Employment rates of working-age population • Proportion of people below 200% Federal Poverty Level • Proportion of children living in poverty
	<p>Stable and Supported Families</p> <ul style="list-style-type: none"> • Access to high-quality child care and early childhood programs • Percentage of single-parent households • Percentage of children in foster care
	<p>High-Quality Education</p> <ul style="list-style-type: none"> • Licensed early childhood and prekindergarten access and participation • Kindergarten readiness • 4th-grade proficiency in literacy and numeracy • Attendance/chronic attendance • 4-year graduation rates and postsecondary readiness • Racial segregation within and across schools • Teachers' years of experience • Climate and culture data (out-of-school suspensions)

A deeper examination of these social drivers will provide detailed insights that the Redding Consortium subcommittees will need to meet some (not all) of the required stipulations for the redistricting plan. Exhibit 5 highlights the stipulations that will be directly informed by the landscape analysis.

The key findings in the discovery phase clearly show, however, that certain social drivers warrant more emphasis in Phase 2 because they will need to be addressed through targeted interventions, **regardless of the proposed district configurations.**

The following sections detail the key findings from the discovery phase and implications for data collection in Phase 2, which will inform the policies and interventions that the Redding Consortium will recommend in its redistricting plan.

Exhibit 5. Stipulations informed by landscape analysis

<p style="text-align: center;">Determining Redistricting Approach</p> <ol style="list-style-type: none"> 1. Redraw district boundaries
<p style="text-align: center;">Community Engagement Subcommittee</p> <ol style="list-style-type: none"> 1. Implications for educators, administrators 2. Engagement of educators, staff, parents, district personnel, and community members 3. Assessment of educational needs and resources required 4. Directives for improving secondary education 5. Process for monitoring and evaluation
<p style="text-align: center;">Operational Impact Subcommittee</p> <ol style="list-style-type: none"> 1. Orderly and minimally disruptive reassignment 2. Permit students to continue attendance 3. Student transportation 4. Implementation timeline
<p style="text-align: center;">Fiscal Impacts Subcommittee</p> <ol style="list-style-type: none"> 1. Resource requirements from state, district, and local 2. Distribution of capital assets and financial obligations 3. Funding for effective implementation
<p style="text-align: center;">Further Recommendations for Action</p> <ol style="list-style-type: none"> 1. Revenue Policies: Referendum Reform and New Castle County Tax District 2. State investment in impacted school districts: (1) High-quality early learning expansion, (2) premium pay policy, (3) specialized programs, (4) enhanced wraparound services, (5) social drivers needs assessment 3. Choice and Charter Reform

Discovery Phase Findings



Finding 1: In order to provide a stronger rationale for redistricting decisions and more impactful supports for students and families, the RCEE subcommittees require (a) a more precise understanding of how students and families experience different combinations of social drivers in different neighborhoods across Wilmington and (b) stronger evidence for how these social drivers affect health and education opportunities.



Interviewees highlighted interconnected challenges

The interviewees who participated in the discovery phase have served the Wilmington community for many years as parent leaders; administrators at schools, community centers, and community-based organizations; and elected officials. In most cases, interviewees had a role in providing wraparound services (holistic services like health care, housing, food assistance, etc.).

Interviewees consistently highlighted that the students and families they serve or have served face a wide variety of challenges in accessing preventive health care; finding jobs; securing food and affordable housing; maintaining reliable transportation; and accessing education, extracurricular activities, and early child care.

Their stories illuminated that social drivers don't operate in isolation but, rather, that they are entangled and tend to amplify one another. For example, one interviewee described the domino effect of unstable housing, education, food access, and family health:

“And so that means that kids don't have a place to put their stuff. They have to get up early, or they're getting in late at night because so-and-so didn't let them in, so they're tired when they go to school. They're eating as they go; they're not necessarily having meals, you know what I mean? They're eating a lot of fast food, cheap dollar store sodas, 3-liter sodas for \$1.25, which is causing—we're seeing a lot more things with the kids' teeth and just the ADHD. [. . .] And I also feel like without having a stable place to live for the child and the parent, it affects their mental health, and they are not working. They don't have income to be able to move. Housing is very expensive right now..”

In another interview, the participant described the relationship between in-school student behavior and community violence:

“The kid is upset. You don't know that he's upset because there were four or five shootings on his block last week. And that connection hasn't been made with the practitioners that we got to have something in place when we hear—or our kids hear—shots at night, that there[s] got to be some way to address that violence.”

These stories are not new or surprising to anyone who has worked in the public sector or has similar lived experiences. Furthermore, these excerpts echo the high-level findings of numerous reports, public health needs assessments, and strategic plans in Delaware and the Wilmington region over the last 25 years (see

Finding 4). Thus, there is no lack of awareness that these entangled and compounding conditions exist and affect students and families.

However, there is an opportunity through the landscape analysis to build a more rigorous evidence base—or “fact pattern,” as one interviewee called it—about how these various conditions intersect and compound for different students and families in different neighborhoods and how those conditions affect their health and education. AIR’s initial review of publicly available social driver data (indicators described above) affirms the interviewees’ stories and suggests and points to specific neighborhoods where more stories need to be gathered.

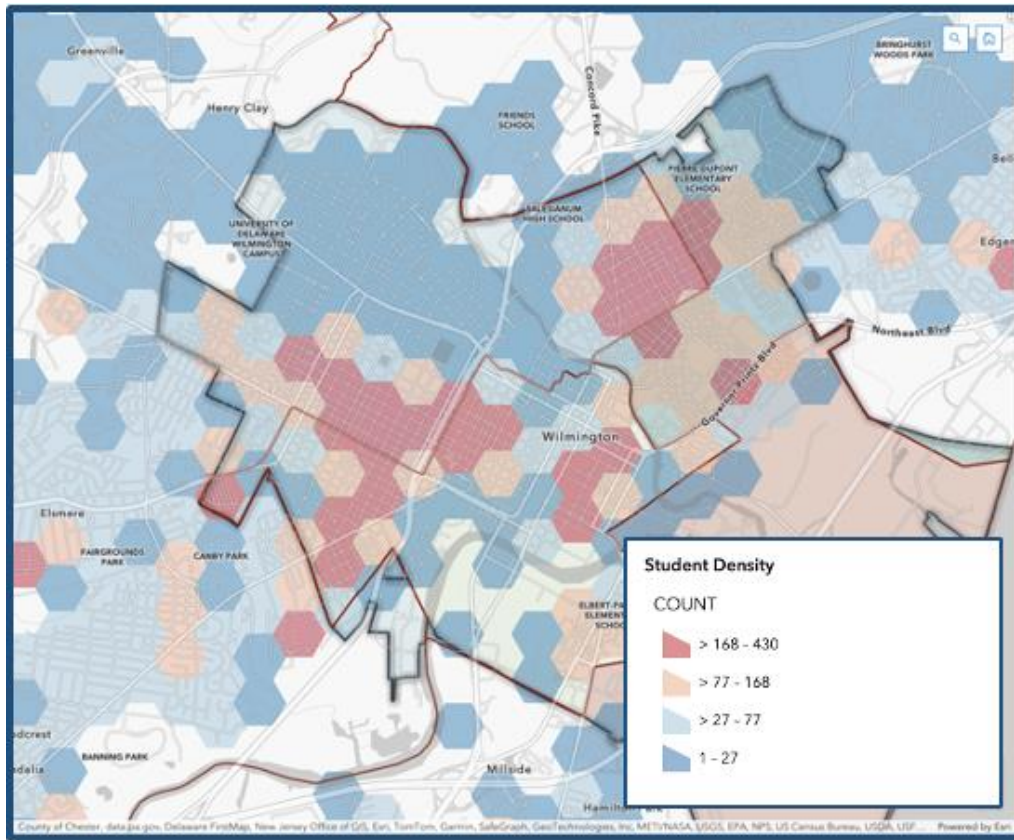
Spatial Data Review



AIR reviewed eight datasets from 7 data sources (e.g., American Community Survey) that include most of the social driver indicators described previously. We converted these datasets into a spatial format so they can be visualized as maps using geographic information systems (GIS) software. We then added de-identified student residency data for all four school districts for the 2024 school year, along with a variety of community assets such as school, community center, library, museum, places of worship, and locations of community development corporations. We subsequently incorporated these data into a simple GIS dashboard, which will be available for use by the Redding Consortium until the final redistricting plan is submitted (visit the [Redding Consortium Landscape Analysis Dashboard](#)).

Using the dashboard, AIR used the discovery phase to conduct high-level explorations of geographic patterns. For example, Exhibit 6 depicts the distribution of the prekindergarten through 12th-grade student population in Wilmington.

Exhibit 6. Distribution of student population in Wilmington



Many of the neighborhoods with the highest concentration of students are neighborhoods with challenging social driver conditions, such as:

- Higher food insecurity
- Higher percentage with low English proficiency
- Lower internet access
- Higher single female householder
- Higher renter-occupied housing
- Higher percentage with no vehicle access

Exhibits 7, 8, and 9 highlight the proximity of social driver conditions (shades of green) and highest quartiles of students (yellow borders).

Exhibit 7. Food insecurity and highest student quartiles

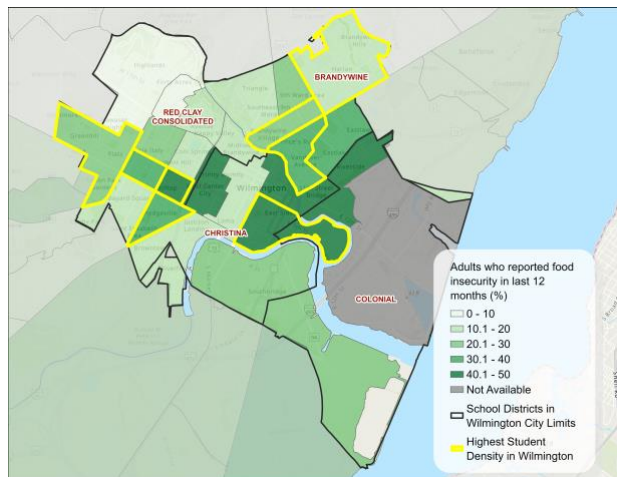


Exhibit 8. No vehicle and highest student quartiles

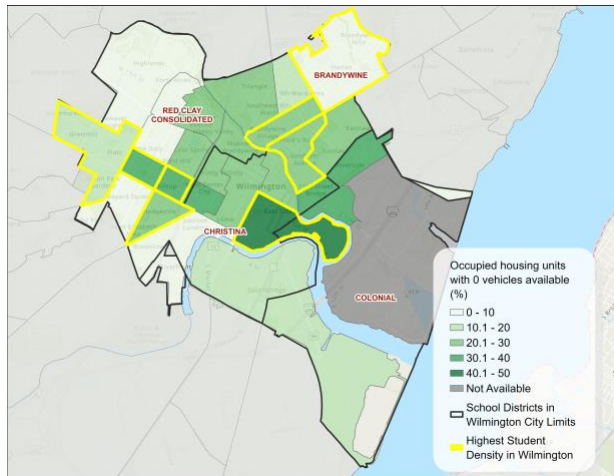
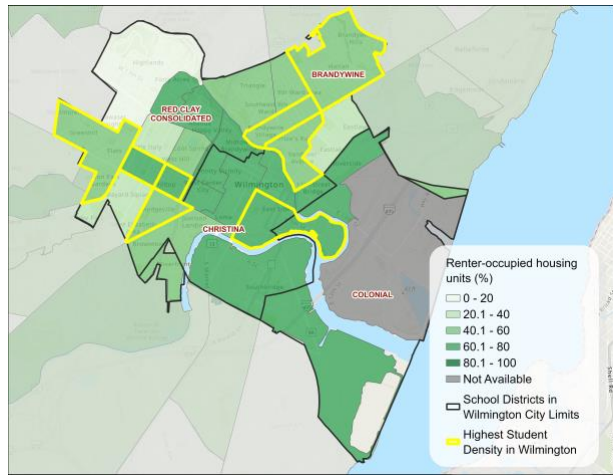


Exhibit 9. Rental housing and highest student quartiles



Using these data, AIR began a high-level exploration of how these social driver conditions vary across school districts. For example, Exhibit 10 shows the averages of the high student concentration areas in Christina and Red Clay, highlighting differences between districts and compared to citywide averages.

Exhibit 10. High student concentration census tracts compared to citywide averages

Social driver outcome	Average of high student concentration census tracts in Christina	Average of high student concentration census tracts in Red Clay	Average of all census tracts in Wilmington
Food insecurity (%)	38%	33%	28%
Renter occupied housing (%)	65%	58%	56%
No vehicle access (%)	36%	28%	23%

Based on the combination of the discovery phase interviews and simple spatial analysis described above, AIR sees an opportunity to compile comprehensive, neighborhood-specific evidence of how social drivers are affecting health and education opportunities for different student populations in the city of Wilmington. In doing so, we hope to provide the Redding Consortium redistricting subcommittees with a strong empirical grounding for allocating resources equitably. The next two sections describe the research questions that AIR will seek to answer and the methods that we will use to address the questions.

Phase 2 Research Questions



To address Finding 1, AIR proposes to address the following research questions in Phase 2:

- How do combinations of social drivers vary by neighborhood?
- What is the relationship between social drivers and schools attended?
- How do school options and travel time vary based on exposure to positive and negative social drivers?
- How do students, parents, guardians, caregivers, and teachers describe the impact of social drivers on education and school choices, and how do experiences vary by neighborhood?

- How does access to high-performing schools vary across census tracts, and how do reassignment scenarios impact students’ access and opportunities?

Phase 2 Data Collection & Analysis



Focus Groups with Students, Parents/Guardians/Caregivers, and School Personnel

AIR understands that one of the most valuable contributions we can make to the Redding Consortium redistricting proposal is to provide strong evidence of how social drivers affect the lived experiences of students and families across different neighborhoods. To do so, we will use the early outputs from the spatial analysis, described below, to confer with the Redding Consortium Working Team and develop a priority list of interviews and focus groups that we believe will be most insightful.

The proposed breakdown of interviews and focus groups is as follows:

- four focus groups with up to **32 high school students** who live in a diverse mix of neighborhoods with varying exposure to social drivers;
- four focus groups with up to **32 parents, guardians, and caregivers** of elementary, middle, and high school students who live in a diverse mix of neighborhoods with varying exposure to social drivers; and
- two focus groups with up to **16 school personnel** (e.g. teachers, teacher assistants, counselors) who work in schools across a diverse mix of neighborhoods with varying exposure to social drivers.

All focus groups will be no more than 75 minutes long, and each participant will receive a \$50 gift card for their time. To assist with recruitment, especially of students and families, we will collaborate with the Redding Consortium Working Team and members of the Community Engagement Subcommittee to define a recruitment approach based on relationships and mindful of the many demands on local schools. We will coordinate with the Wilmington Learning Collaborative to ensure that we are not overtaxing certain schools and families.

AIR expects the emergent findings from the focus groups to surface new insights that will require adjustments to our proposed spatial data analysis, which we describe in detail below.

Spatial Data Analysis



The research questions above have one thing in common: they are all place specific. Spatial data analysis methods will enable AIR to examine existing quantitative data (e.g., numeric data like the number of Wilmington students attending a particular school) to place-specific data like student residence and school locations.

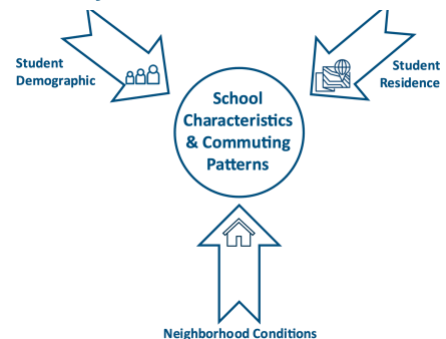
The spatial analysis will be conducted using existing data from the sources listed in Exhibit 1 along with deidentified student data and school-level data provided by the Delaware Department of Education. We will primarily use three spatial data analysis methods: regression, travel distance calculations, and simple descriptive statistics. Together, these methods provide a way to study how location is associated with outcomes (e.g. student residence, school attended, and travel distance). By linking student data to their neighborhoods,² we also can identify how neighborhood conditions (food insecurity, internet access, etc.)

² AIR recognizes that the term “neighborhood” means different things to different people. For the purpose of the spatial analyses, we define “neighborhood” as the census tract in which the student resides and trust that the interviews and focus groups will provide more specific insights into different neighborhoods and their characteristics.

affect health and education options. AIR proposes to begin Phase 2 by conducting the analyses described below and will adjust as new insights emerge.

Identifying patterns of student residence and schools attended. AIR will analyze student residence data across four districts, considering race, ethnicity, and neighborhood social driver conditions (see Exhibit 11). We will then examine the characteristics of the schools that the students in different neighborhoods are attending (e.g., location, student demographics, literacy and numeracy outcomes, attendance, extracurricular activities). These analyses will help us identify the relationships among student residence, neighborhood characteristics, and school characteristics. For example, the resulting maps may highlight neighborhoods in which specific student demographics are tracking to schools with specific characteristics.

Exhibit 11. Approach to spatial analysis



Analyzing travel distance and commuting patterns. One theme that surfaced many times in the discovery interview was the challenge that families experience with school commutes (e.g., busing). AIR proposes to measure how far students in different neighborhoods across Wilmington travel to school and whether there are differences between student demographics and neighborhood characteristics. We also will compare the average travel distance for Wilmington students to those in surrounding areas to see whether there are significant differences and will explore the relationship among travel distances, school start time, and access to after school extracurricular activities.

Exploring the implications of alternative school assignments. Spatial methods are also well suited for creating exploratory scenarios. For example, we can explore how redistricting might affect access to traditional public schools or district charters³ based on hypothetical school assignments. This process will involve:

- identifying and mapping neighborhoods with the lowest percentage of students attending high-performing or well-resourced schools (note: AIR will need to collaborate with the Redding Consortium to agree on common definitions of “high performing” and “well resourced”);
- creating new borders for the district reconfiguration options that the Redding Consortium subcommittees choose to prioritize;
- creating a scenario in which the students in the neighborhoods described above are reassigned to the closest schools based on the different district scenarios; and
- examining how the hypothetical reassignments would affect the characteristics of the schools attended and commute times.

Benefit to the Redding Consortium Subcommittees

AIR believes that by addressing the research questions using the methods described above, we will support the following stipulations for the redistricting plan:

- Focus groups will provide opportunities for **community engagement**, and findings may inform place-specific community engagement strategies.
- Focus groups likely will yield evidence of **educational needs** across different neighborhoods in Wilmington.

³ These scenarios would not include non-district charter schools because students are free to apply to enroll in those charters, regardless of residence.

- Commute analyses may inform **student transportation** proposals.
- Reassignment scenarios may inform proposal for **least disruptive reassignment**.
- Focus groups and spatial analyses will provide neighborhood-specific evidence to justify differentiated resource allocation and **enhanced wraparound services**, regardless of district configuration.

In the following section, we describe the second key finding from the discovery phase and implications for Phase 2 data collection and redistricting stipulations.



Finding 2. The relationship between high student mobility and access to affordable housing surfaced as a priority issue across a majority of interviews. Providing a stronger rationale for redistricting decisions and more impactful supports for students and families requires a more precise understanding of the scale and root causes of student mobility and the impact on health and education.

Interviewees Emphasized the Connection Between Student Mobility and Housing



During the discovery phase interviews, interviewees across the board described the challenging relationship between high levels of student mobility and access to affordable housing. They emphasized that the high student mobility is especially problematic in Wilmington, where small moves within the city limits can mean transfers across districts with different curricula and support infrastructure (e.g., computer information systems staff at every campus in some districts and sporadically in others). Interviewees noted that although there are a variety of reasons that families would need to move, the most common reason from their perspective is a challenging housing market with variable access to housing options that are affordable. One interviewee observed:

“They built these new houses around there, which pulled the affordable housing. . . They’re now running between \$250,000 and \$300,000. There’s no way that’s affordable housing.”

Several interviewees elaborated on the tension between new real estate developments and student mobility. For example, one participant explained:

“[T]he Northeast part of Wilmington, East Side, on balance, it’s still very Wilmington, but there [are] also some, quite frankly, housing development efforts that look great, by the way, that I believe are forcing people to the county.”

Another interviewee echoed this perspective, observing that as neighborhoods improve, the landscape of affordable and subsidized housing evolves.

“The better the neighborhood, the least affordability options exist. So like I said, the units we have available, they’re not in the best neighborhoods.”

AIR recognizes that addressing the complex dynamics between real estate and urban development and access to affordable housing is far beyond the scope of this landscape analysis and the Redding Consortium planning process. However, the opportunity at hand is to foster a more sophisticated, shared

understanding of housing dynamics, their impact on student mobility, and the effect on health and educational access and opportunity. In doing so, we can contribute to the “fact pattern” that others have established in prior work.

Prior Examinations of Factors Influencing Housing Access



AIR’s desk research in the discovery phase included several reports describing how certain populations in Delaware have a greater risk of experiencing housing instability than others because of dynamics among landlord behavior, housing market conditions, and public policies. Renters across the state of Delaware have cited occupancy requirements for renters, which can result in families with multiple children having to rent larger units than they may be able to afford (Delaware State Housing Authority, 2023). This limits the number of units available to families and further constrains their ability to rent in areas near their children’s schools.

Reports noted other practices that can exacerbate housing instability include landlords refusing to renew the leases of long-term renters. Situations of domestic violence, loss of renter income, and increased housing demand (due to the increased need for student housing) can disincentivize landlords from renewing the leases of families. Single-parent households—specifically, homes led by single mothers—often rely on child support payments to meet increasing costs. Landlords, in turn, reportedly view this income source as unstable. As a result, they can be hesitant to lease properties to families who rely on child support as a substantial amount of their income.

The various social drivers of housing instability that are documented in these reports reveal the need for a deeper investigation into how high mobility, unstable housing, and lack of housing near schools affect the health and educational outcomes for Wilmington students (Delaware State Housing Authority, 2023).

Phase 2 Research Questions



To address Finding 2, AIR proposes to address the following research questions in Phase 2:

- What are the cross-district and cross-school student mobility patterns for students who reside or have resided in Wilmington over the last 5 years?
- How do parents, guardians, and caregivers describe the root causes of student mobility and the impact on student health and education opportunities?
- How does student mobility affect the ability of schools and community-based organizations to serve students and families?

Phase 2 Data Collection & Analysis



Spatial Analysis of Student Mobility

To inform the redistricting plan, AIR proposes to analyze student mobility patterns and visualize student movement between schools and districts over time. If the data are available (e.g., multiyear student residence and school enrollment data from the Delaware Department of Education), we will suggest conducting a descriptive analysis of elementary school students who resided in Wilmington when they began kindergarten and how (if at all) their residences and schools changed over 5 years.

By examining these student records, AIR can identify patterns of movement, including whether students stayed in the same school, transferred within their district, or switched to a different district. We will measure how often these changes occur, identify schools or districts with high mobility rates, and explore whether there are differences in mobility of students across different demographics and neighborhoods.

The mobility patterns will then be mapped and analyzed in the context of school characteristics described in Finding 1. These analyses will inform the recruitment strategy for the focus groups described in the next section.



Focus Groups With Parents/Guardians/Caregivers, School Personnel, and Frontline Staff From the Housing Authority

Building off of the student mobility analyses described in the previous section, AIR proposes to conduct a series of focus groups to paint a clearer picture of the root causes of student mobility and the impact on health and education opportunities. The proposed breakdown of focus groups is as follows:

- four focus groups with up to **32 parents, guardians, and caregivers** of students who changed schools in the last 2 years;
- two focus groups with up to **16 school personnel** who support student transitions and well-being (e.g., counselors, social workers, Communities in Schools staff); and
- two focus groups with up to **16 frontline staff** from the housing authority or other community-based organizations and community centers that provide wraparound supports, including housing assistance.

The focus groups will be no more than 75 minutes long, and each participant will receive a \$50 gift card for their time. We will collaborate with the Redding Consortium Working Team and members of the Community Engagement Subcommittee to define a recruitment approach that avoids duplication with other focus group participants and is targeted to neighborhoods of interest revealed through the student mobility analysis.

Benefit to the Redding Consortium Subcommittees

AIR believes that by addressing the research questions using the methods described above, we will support the following stipulations for the redistricting plan:

- Focus groups and spatial analyses may highlight opportunities for **community engagement** and potential strategies to provide information and awareness to mitigate student mobility.
- Focus groups likely will yield evidence of **educational needs** for highly mobile student populations.
- Focus groups and spatial analyses will provide neighborhood-specific evidence to justify differentiated resource allocation and **enhanced wraparound services**, regardless of district configuration.

In the following section, we describe the third key finding from the discovery phase and implications for Phase 2 data collection and redistricting stipulations.



Finding 3. Community centers historically have served as vital spaces for community connections and after-school enrichment and academic support, but due to changing civic priorities and funding availability, many have closed or are struggling to stay open. Providing a stronger rationale for redistricting decisions and more impactful supports for students requires a more precise understanding of the broader landscape of out-of-school and after-school enrichment and supports and how varying access affects student experiences and outcomes.

Interviewees Emphasized the Critical Importance of Community Centers



During the discovery phase interviews, another prominent theme that emerged was the way in which community centers historically have served as engines for community cohesion and primary sites for youth engagement. Interviewees emphasized that these centers also have served as hubs for the deployment of wraparound services such as health care, education, and social support, which are vital for the well-being of the community.

Despite the critical role that community centers traditionally have played in Wilmington, many have closed over the last 20 years, and those that remain face significant barriers to implementation and sustainability. One interviewee reflected on the current state of community centers:

“. . . our community center landscape was rich. . . there were five or six of us that had some emphasis on kids from the city. And that was helpful. I believe that that system no longer exists.”

Other interviewees reported that the diminished landscape of community centers is due in part to shifts in city government priorities and unstable city funding streams for supporting community center operations. As a result, the remaining community centers now compete for the same philanthropic dollars, discouraging a culture of collaboration among the centers. One interviewee explained:

“I think another issue is you have these RFPs, requests for funding, and that hurts community centers because now, according [to] what type of person you get. . . I collaborate with everybody, so I don’t worry about the dollar or the numbers. I collaborate with everybody because I think it’s important that we stick together. But then you get some that might say, ‘Hey, I can’t collaborate with others, because if I do, I won’t get the funding, or I lose out.’”

For those community centers that have managed to sustain their services, funding is only one of the major challenges. The current school district configuration presents challenges for centers that seek to serve students across the city and county. One interviewee described their experience trying to coordinate services across schools and districts:

“We opened up and provided services to kids from 17 different schools in six different school districts. We can’t get any coordination of transportation or services; it’s a nightmare.”

In Phase 2 of the landscape analysis, AIR sees an opportunity to examine the current state of community centers further, along with the broader landscape of organizations providing out-of-school enrichment and support to students in Wilmington. The following sections detail the research questions that we propose to explore and the data collection methods that we recommend for addressing the questions.

Phase 2 Research Questions



To address Finding 3, AIR proposes to address the following research questions in Phase 2:

- Beyond community centers, what is the broader landscape for out-of-school and after-school enrichment and support?

- What services are provided? What services do current providers feel that they need to offer but cannot?
- How does access vary by neighborhood?
- How do the experiences of youth vary based on their proximity or access to these organizations?
- What are the alternative spaces that are places of community, connection, and support for youth?

Phase 2 Data Collection & Analysis



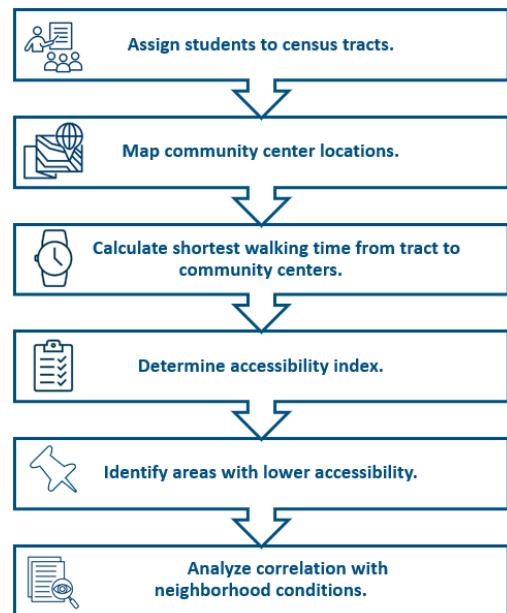
Incorporating Community Centers and Youth-Serving Organizations into Spatial Analysis

Given the importance of understanding the landscape of out-of-school enrichment and support to inform redistricting, AIR proposes to incorporate community centers and other youth-serving organizations into our ongoing spatial analysis. In doing so, we aim to (a) understand the types of programs currently offered, (b) identify gaps in support, and (c) examine how access to these resources varies by neighborhood and how youth experiences differ based on their proximity to community centers and youth programming.

Cataloging Spatial Data. AIR will begin by building an internal database using the Wilmington City Council’s [Community Organizations resource page](#) to gather a full list of organizations identified as “community centers” and “youth services” or “youth-serving organizations.” We will cross-reference our list with previous asset-mapping efforts and will make brief phone calls to each organization to ensure that it is still in operation. As we identify more organizations through interviews and focus groups, we will add them to our database and incorporate our updated data into our spatial analyses.

Assessing Student Access to Community Organizations. To understand variances in access to community centers and other youth-serving organizations, AIR will develop an accessibility index (AI) to measure how easily students can reach the various options in Wilmington. The AI will help evaluate overall accessibility by considering student distribution and travel time to the nearest community center. To calculate this information, AIR will assign students to each census tract in Wilmington. We will then map the locations of community centers and calculate the shortest walking time from each census tract to the nearest center. The AI for each neighborhood will be determined by combining the student population of each tract with its minimum travel time to a community center. This approach ensures that areas with a higher student population and longer travel times will have lower accessibility scores, highlighting regions that may need better access to organizations providing out-of-school enrichment and support. We will also map how these lower accessible areas correlate with the different social conditions of the neighborhoods.

Exhibit 12. Process for measuring community center accessibility



Interviews and Focus Groups With Centers, Students, and Parents/Guardians/Caregivers



The discovery phase interviews were unequivocal about the historical importance of community centers in Wilmington. The landscape analysis presents an opportunity to understand the current experience of staff as well as what the organizations mean to students and families with varying levels of access. To capture these insights, we propose to conduct:

- **five interviews with community center staff;**
- **five interviews with other youth-serving organizations** that we learn about through prior interviews or focus groups (e.g., churches);
- two focus groups with up to **16 high school students** who reside in neighborhoods with varied access to community centers and after school options; and
- two focus groups with up to **16 elementary, middle, and high school parents, guardians, or caregivers** who reside in neighborhoods with varied access to community centers and after-school options.

Benefit to the Redding Consortium Subcommittees

AIR believes that by addressing the research questions using the methods described above, we will support the following stipulations for the redistricting plan:

- Spatial analytics and focus groups likely will yield evidence of **educational needs**, with an emphasis on access to out-of-school enrichment and extracurricular activities.
- Focus groups and spatial analyses will provide neighborhood-specific evidence to justify differentiated resource allocation and **enhanced wraparound services**, regardless of district configuration.

In the following section, we describe the fourth key finding from the discovery phase and implications for Phase 2 data collection and redistricting stipulations.



Finding 4. Extensive investments were made across a wide variety of organizations in Wilmington to address social drivers. Providing a stronger rationale for redistricting decisions and more impactful supports for students requires a more precise understanding of the current state of collaboration between organizations and with districts, and how the current district configuration affects their ability to provide wraparound services.

Wilmington Investment in Wraparound Supports



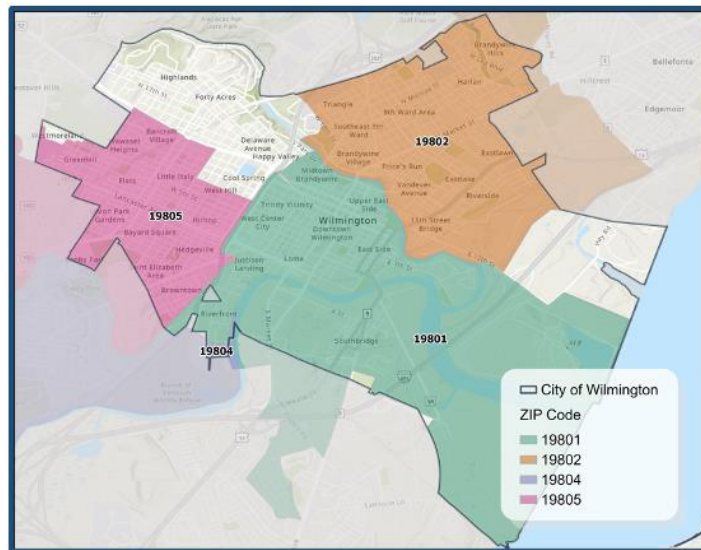
The discovery phase desk review affirmed what many interviewees and Redding Consortium members described in the earliest phases of the landscape analysis: Wilmington is home to many nonprofit organizations dedicated to addressing social drivers and providing services to improve the lives of its residents.

For example, recent reports from organizations such as ChristianaCare, Housing Alliance of Delaware, Nemours, Prosperity Now, Delaware State Housing Authority, and University of Delaware are focused on social drivers of health and education and advocate for wraparound supports in specific neighborhoods across Wilmington and northern New Castle County. For example:

- ZIP codes 19801, 19802, and 19805 have higher burdens of **food insecurity** than the general region, touching students in all four districts. (Harrison, Brooks, Goldstein, & Papas, 2021)

- There are disparities in **access to preventive care** along the Route 9 corridor and in ZIP codes 19804 and 19805 (see Exhibit 13 for ZIP code locations), affecting students in Red Clay, Christina, and Colonial. (Nemours Children’s Health, 2022)
- The concentration of **substandard housing** is located primarily east of Route 13 and west of Washington Street in an area with high poverty rates and large populations of Black and Latino residents. (Stout Risius Ross, LLC, 2021)

Exhibit 13. ZIP codes highlighted in recent reports



In addition, Wilmington has multiple community development corporations (CDCs), each of which enacts place-based plans to improve conditions in specific neighborhoods across Wilmington.

Over the last decade, many CDCs have published strategic plans that outline a broad set of goals and initiatives to help their neighborhoods and to address social drivers. For example, several CDCs are heavily invested in creating affordable and safe housing and helping residents with access to healthy groceries (Mend Collaborative, 2025; Reach Riverside, 2023; Asakura Robinson, South Wilmington Planning Network, & Southbridge Civic Association, 2021; West Side Grows Together, 2023). Exhibit 14 provides an overview of active initiatives and aspirations and strategic goals for the future.

Exhibit 14. Crosswalk of initiatives across Wilmington CDCs

Area	Topic	Westside	West Center City*	Northwest	Northeast	Eastside	Southbridge	Route 9	Riverside
Housing	Housing repair programs	△		○	△	△	△	△	○
	Affordable housing	△			○	△	△		△
	Special population housing development	△							
Youth and Educational Programming	Kindergarten readiness program			○					△
	Youth programming and engagement	○		△		○	○	△	△
	Summer educational programming	△							
Health	Affordable and healthy groceries	△	△	△		△	△	○	△
	Health screening and care	○				△	△		△
Neighborhood Enhancements	Community space building or renovation	△	△	△	△	△	○	△	△
	Neighborhood enhancement for public safety	△		○			△		○
	Biking/Walkability	○		△		△	○	△	○
	Transportation	○			△	△	○	△	○
Economic	Small business support	△	△	△	○	○	○		○
	Workforce training and placement		△			○	○		

Notes. △ Ongoing or known accomplished goal. ○ Known strategic goal with no public updates found.
 * Indicates that CDC did not have a public strategic plan.

The body of work and geographic focus of all the organizations described above are germane to the redistricting effort because they often share a commitment to addressing the same social drivers and serving the same neighborhoods. However, doing so effectively will require skillful coordination with one another and with whichever district configuration emerges.

The following sections detail the research questions that AIR proposes to explore and the data collection methods that we recommend for supporting service alignment and collaboration among like-minded organizations.

Phase 2 Research Questions



To address Finding 4, AIR proposes to address the following research questions in Phase 2:

- Within the current landscape of organizations providing wraparound services to students and families, what are their priority service areas, and what wraparound services do they provide?
- How does the current district configuration affect their ability to provide wraparound services?
- What are areas of shared interest between organizations and opportunities for collective impact?

Phase 2 Data Collection & Analysis



Interviews With Local Service Organizations and CDCs

To deepen our understanding of the landscape of organizations addressing social drivers across the city, AIR proposes to conduct 1-hour interviews with up to **10 administrators and/or frontline staff from a mix of service organizations and CDCs** described above.

To identify potential organizations, we will refer to our ongoing spatial analyses to prioritize organizations whose service area and services are aligned to priority neighborhoods and concentrations of students. AIR will collaborate with the Redding Consortium Working Team and members of the Community Engagement Subcommittee to vet our proposed list and make additional recommendations.



Incorporating Local Service Organizations and CDCs Into Spatial Analyses

AIR began to catalog the different CDCs and their investments aligned to social drivers in Phase I. We propose to continue gathering information on additional CDCs (if any) along with other local service organizations that focus on addressing social drivers within specific geographies.

As noted in the previous section, we will rely first on the Wilmington City Council's [Community Organizations resource page](#) and grow the database based on additional interviews, focus groups, and desk research. Once we have identified all potential organizations, AIR will crosswalk the organization with different social driver support (providing housing assistance, food support, etc.). These data will be included in the mapping application, enabling individuals to see the distribution of different services and alignment (or lack thereof) to areas with a high percentage of social drivers (e.g., high food insecurity).

Benefit to the Redding Consortium Subcommittees

AIR believes that by addressing the research questions using the methods described above, we will support the following stipulations for the redistricting plan:

- Interviews may provide neighborhood-specific evidence to justify differentiated resource allocation and **enhanced wraparound services and guide collective action**, regardless of district configuration.
- Mapping the service areas of the CDCs and other local service organizations may inform the ways in which the subcommittees chose to **redraw district boundaries**.

In the following section, we describe the fifth and final key finding from the discovery phase and implications for Phase 2 data collection and redistricting stipulations.



Finding 5. There is a notable and longstanding history of participatory action research (PAR) projects in Wilmington, along with multiple organizations and academics that actively support PAR and youth-led PAR work. The landscape analysis will benefit from PAR, and AIR should partner with a local community-based organization and a team of student researchers to provide unique insights into how the Redding Consortium can provide a stronger rationale for redistricting decisions and more impactful supports for students and their families.

A Rich History of Participatory Action Research in Wilmington



The previous sections describe research activities that AIR staff will lead in collaboration with the Redding Consortium Working Team and key members of the redistricting subcommittees. AIR is confident about pursuing more information on the key findings described above and is certain there are additional priorities and nuances to uncover that will provide critical insights to the Redding Consortium subcommittees.

To provide additional nuance to the student experience, AIR proposed facilitating a participatory action research (PAR) component to the discovery phase of the landscape analysis to involve youth (i.e., high school students) in collecting data, interpreting findings, and making recommendations that will directly impact their lives and those of their siblings.

During the discovery phase, AIR was impressed by the long, active legacy of PAR in Wilmington. *The People's Report* (2013), the Street PAR Health Project, and the Center for Structural Equity (to name a few) revealed a widespread belief that PAR is important but also the deep local capacity and infrastructure to support this critical work.

Based on these insights, AIR recognizes that we should partner with a local community-based organization and a team of student researchers to consider the Redding Consortium's task, develop research questions, and identify the most appropriate methods for addressing the research questions. AIR is engaged in active discussions about potential PAR partnerships and will update subcommittees once the details are finalized.

Benefit to the Redding Consortium Subcommittees

AIR believes that the youth-led PAR work will provide unique and important insights to the Redding Consortium as its members formulate their redistricting plan and consider implications for more robust wraparound services that currently exist. AIR and our youth-led PAR partners will update the Redding Consortium subcommittees on our progress during the landscape analysis briefing at the second Subcommittee Convening.

Conclusion

Phase 2 of the landscape analysis begins in March 2025 and will conclude by the end of June 2025. The key findings and proposed research questions, and the data collection activities described above, represent a solid starting point. As new insights emerge and opportunities surface, AIR expects to collaborate with the Redding Consortium and our PAR partners to go where the data take us. As we follow that path, we will maintain our focus on the ultimate goal: to provide the Redding Consortium with a rigorous evidence base to support its rationale for redistricting and to present recommendations for better supporting students and families, regardless of changes in district boundaries.

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1400 Crystal Drive, 10th Floor
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