



COVID-19 PANDEMIC

BUS ACCESS & CONNECTIVITY ANALYSIS

Among Vulnerable Populations in
the Wilmington, Delaware Region



Public Transportation

Channel for
viral spread

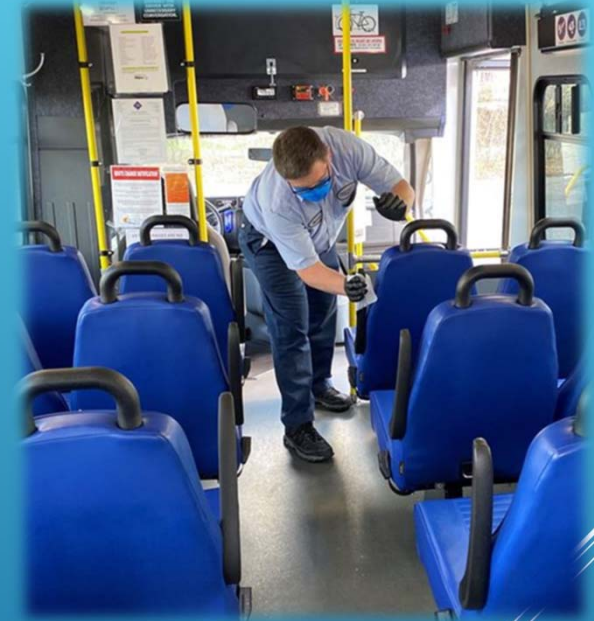


Essential
transportation

1920 Pandemic



2020 Pandemic





BACKGROUND

DART Pandemic-related Measures

- Reduced daily runs
 - 38% of normal **before** May 17
- Free (before June 1); cashless discounts today
- Physical distancing/face coverings
 - Extra “timing” buses
- Riders that have been out-of-state (before June 1), or potentially exposed to the virus asked not to ride



BACKGROUND

Cecil Transit Pandemic-related Measures

- Reduced service (prior to June 8)
 - No Elkton-Newark and Commuter Connection lines
 - Glasgow Connection demand response only
 - No Saturday service (still in place)
- Face coverings required
- Riders with potential virus exposure banned (prior to June 8)
- Physical distancing



BACKGROUND

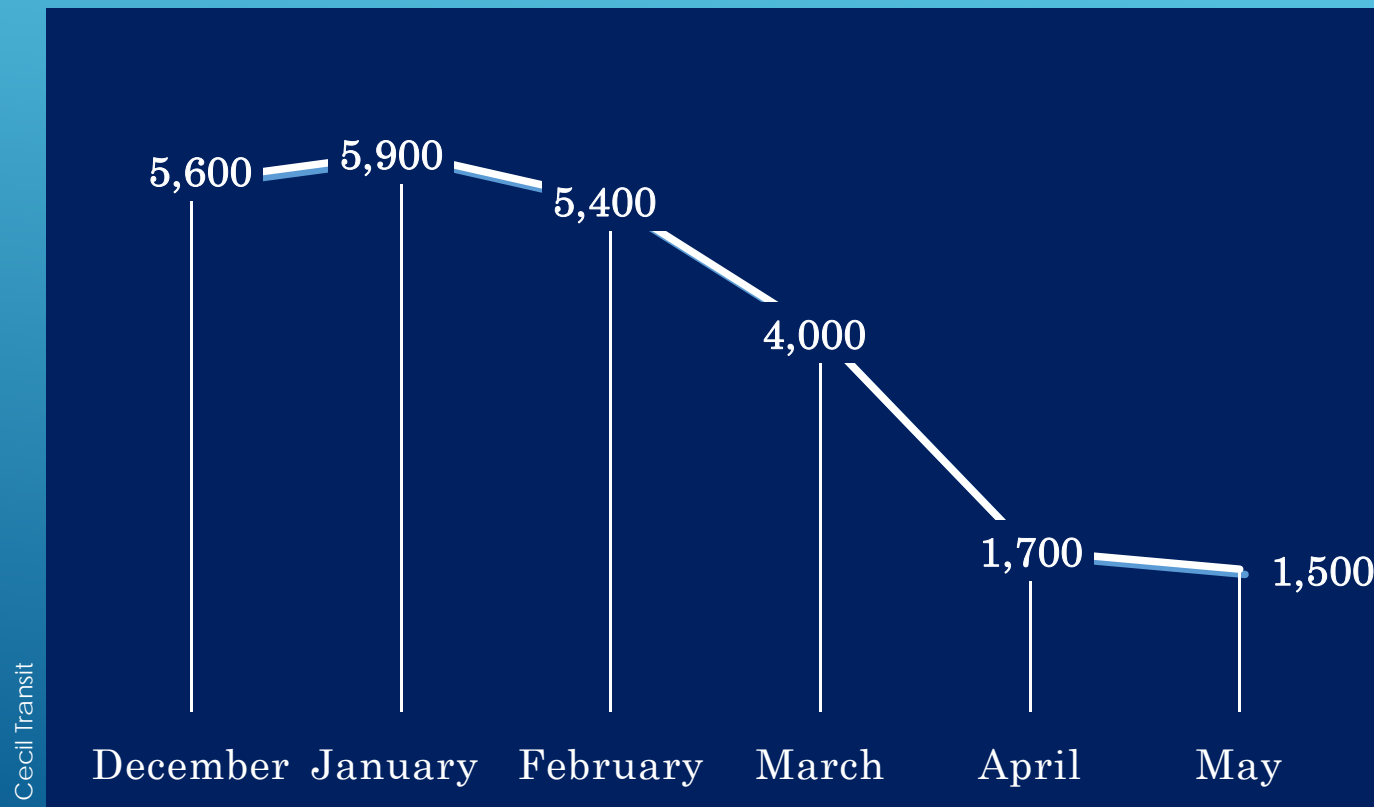
Recent New Castle County Bus Ridership





BACKGROUND

Recent Cecil County Bus Ridership





BACKGROUND

How good is coverage to vulnerable groups?

- **Food deserts**
Access and frequency on buses to supermarkets
- **Areas of Social Determinates of Health Concern**
Access and frequency of all buses

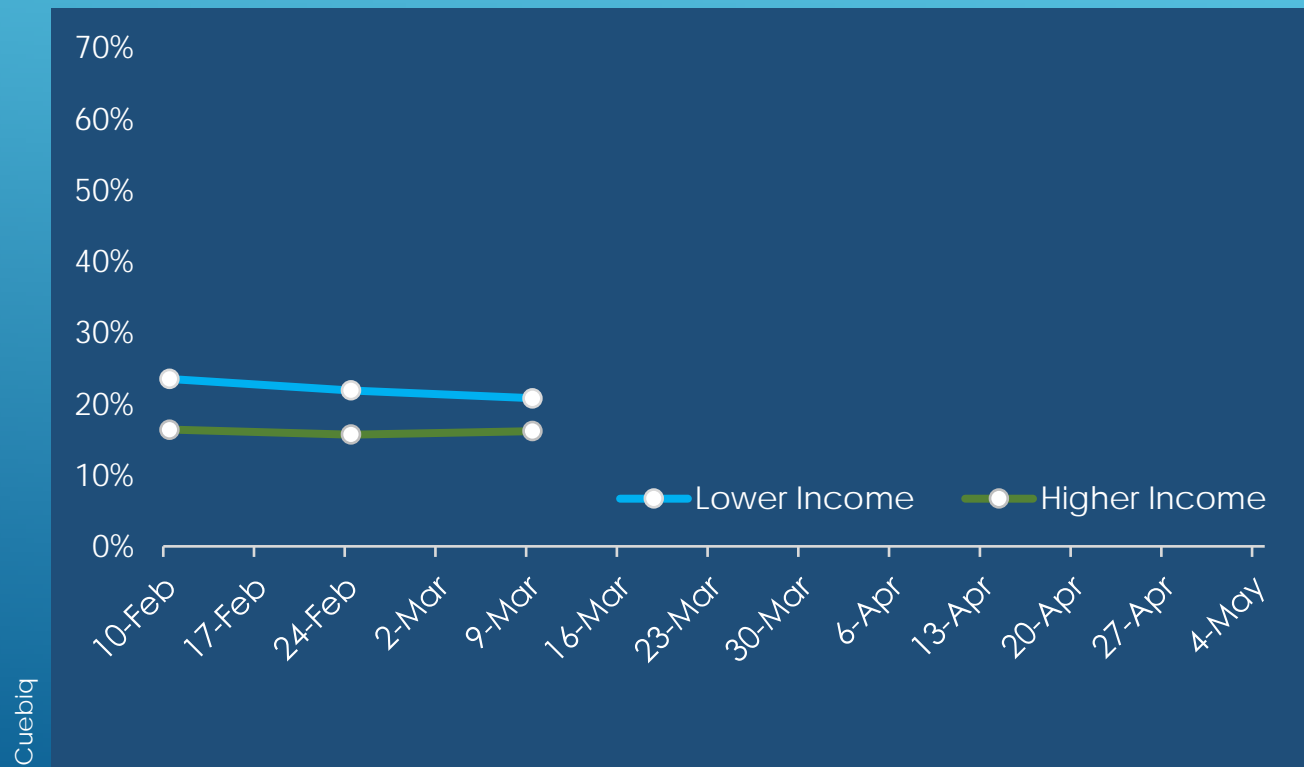
Ira Porter/Delaware News Journal





BACKGROUND

Sheltering in Place, Philadelphia MSA





BACKGROUND

Sheltering in Place, Philadelphia MSA



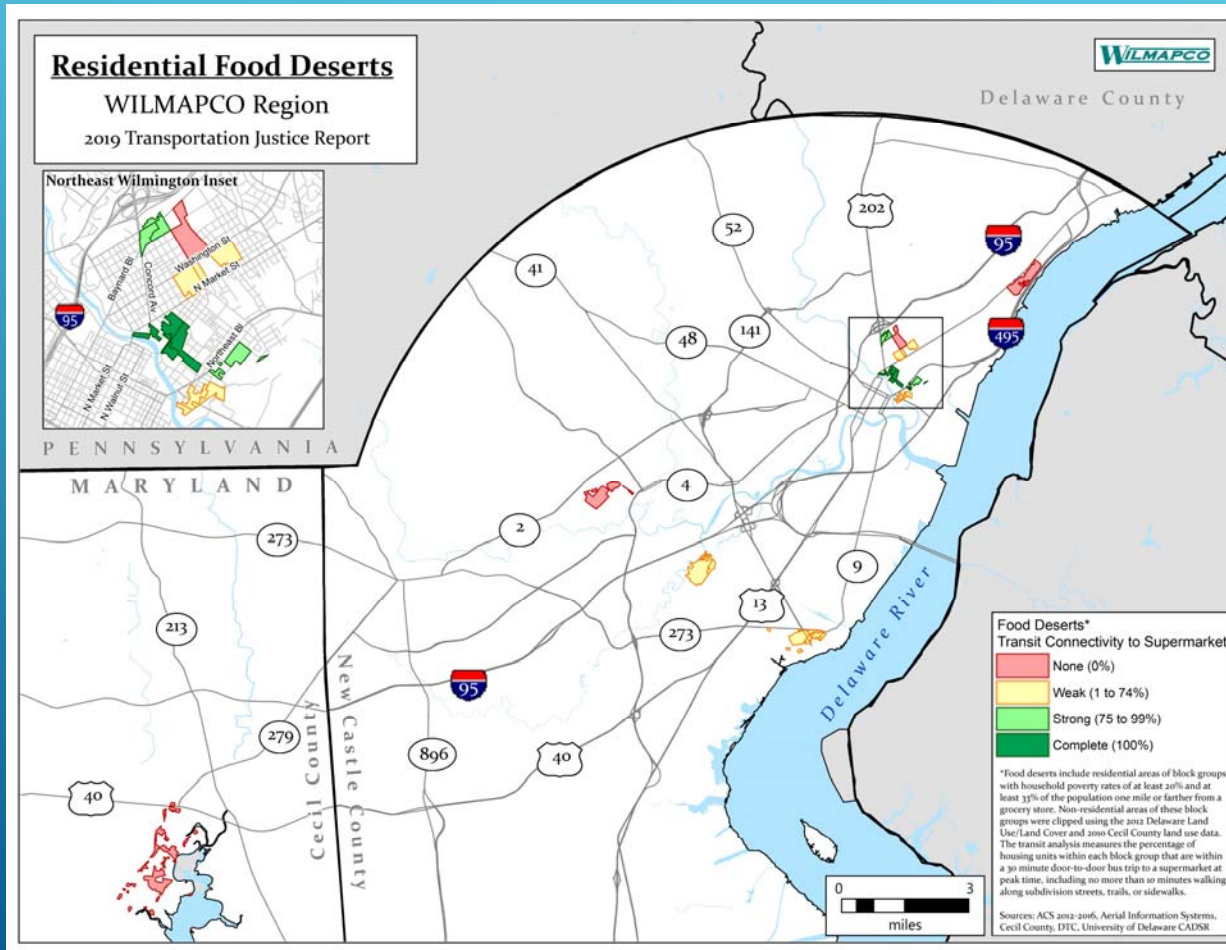


FOOD DESERTS

2019 TJ REPORT

Block groups with $>20\%$ poverty where $\geq 33\%$ of the population are ≥ 1 mile from a supermarket

Only residential areas shown



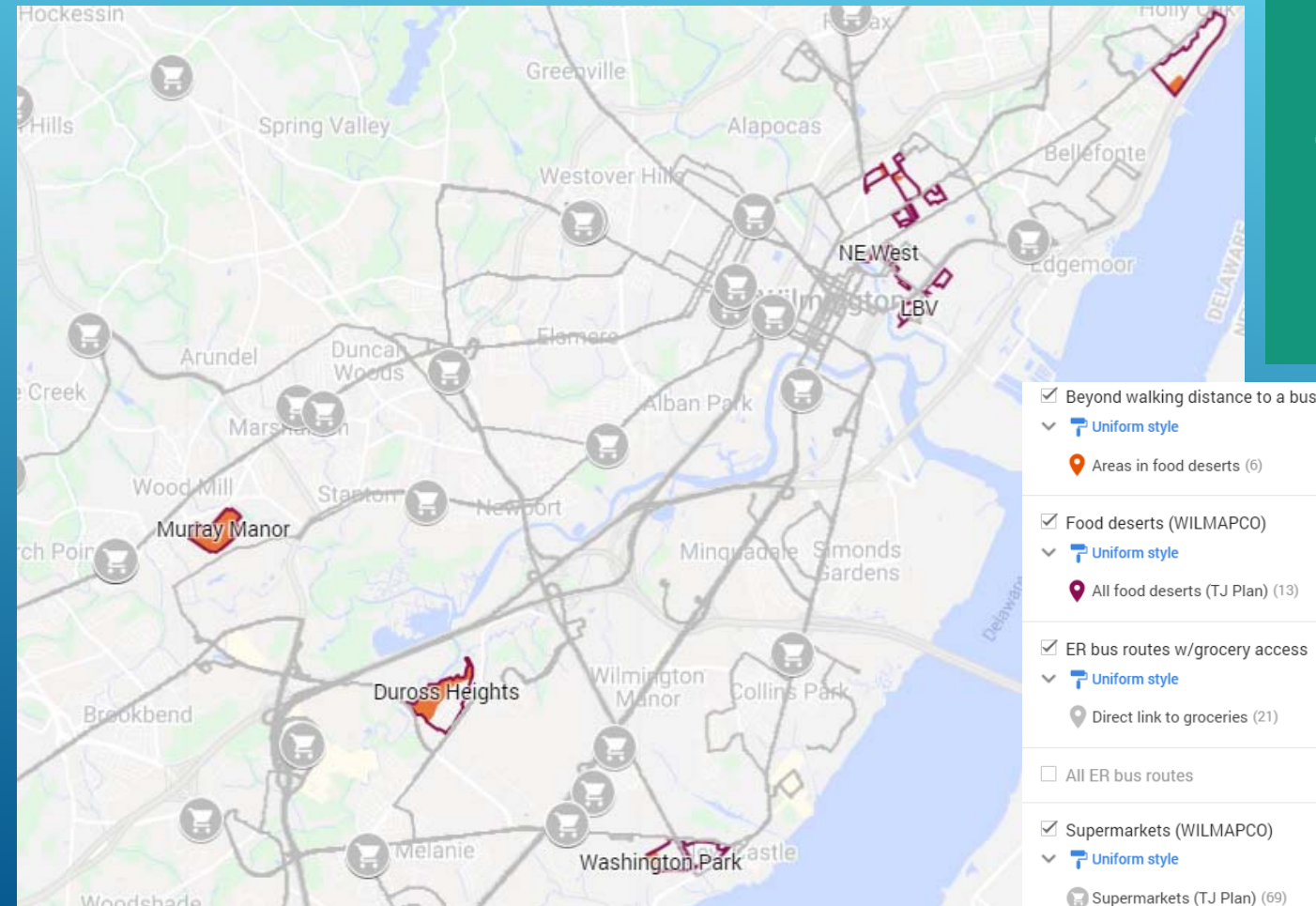


FOOD DESERTS

Google MyMaps

NEW CASTLE CO.

80% of households in food deserts are within **WALKING DISTANCE** to a bus with direct access to a supermarket

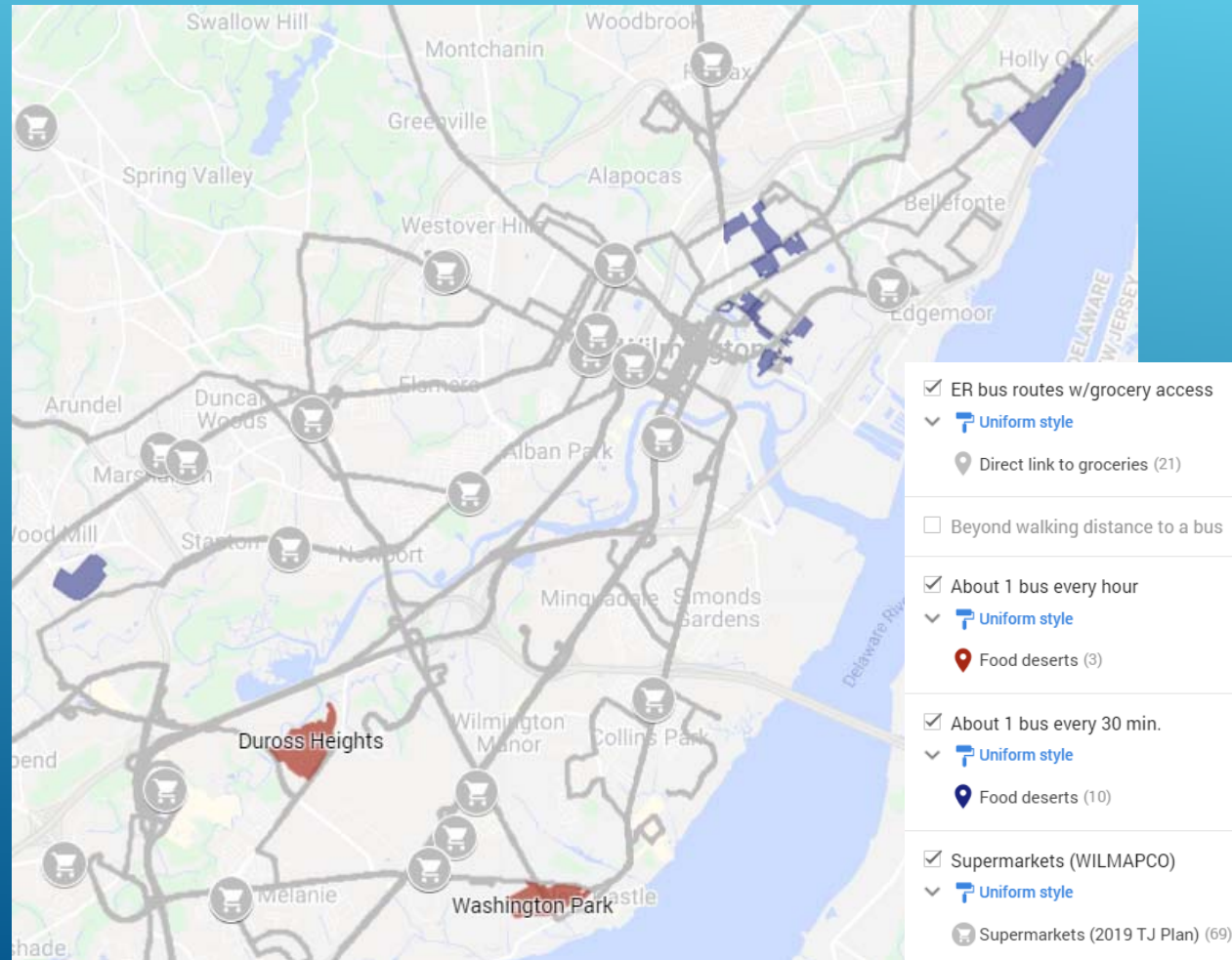


WILMAPCO



FOOD DESERTS

Google MyMaps



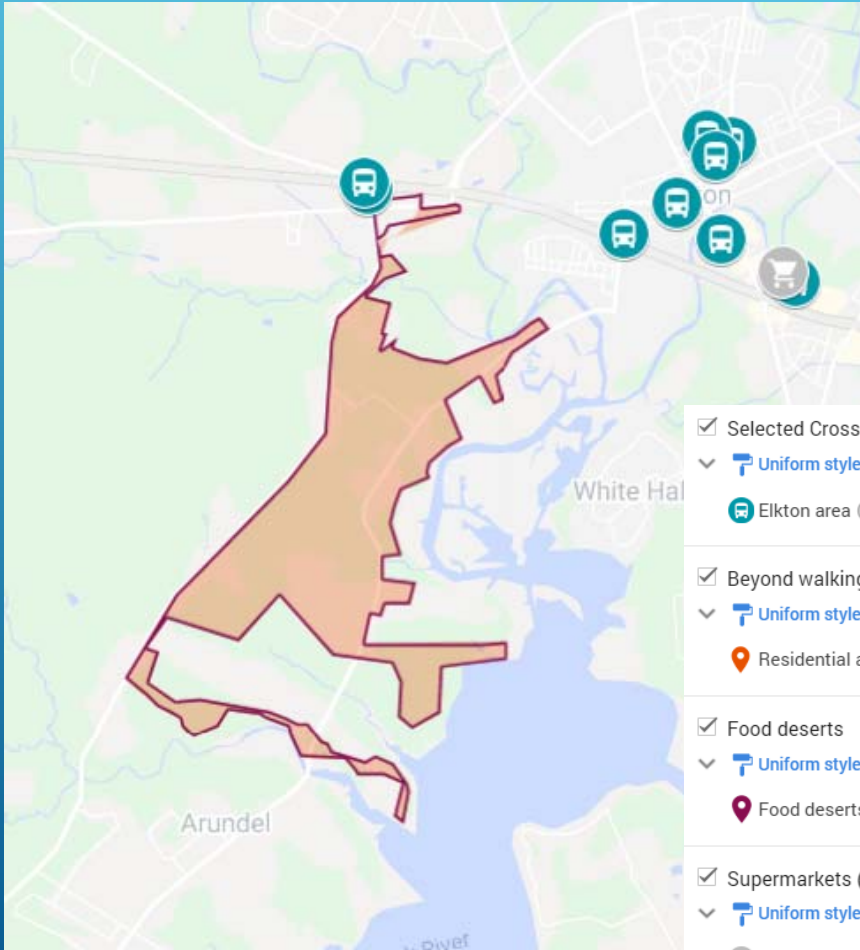
NEW CASTLE CO.

65% of households in food deserts had accessible, relatively **GOOD FREQUENCY** bus service to supermarkets



FOOD DESERTS

Google MyMaps



CECIL CO.

4%

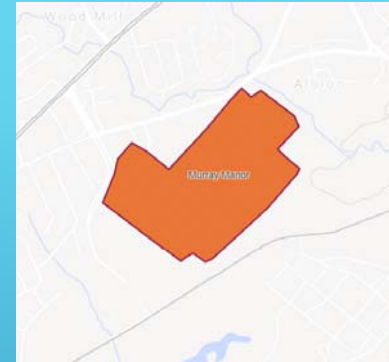
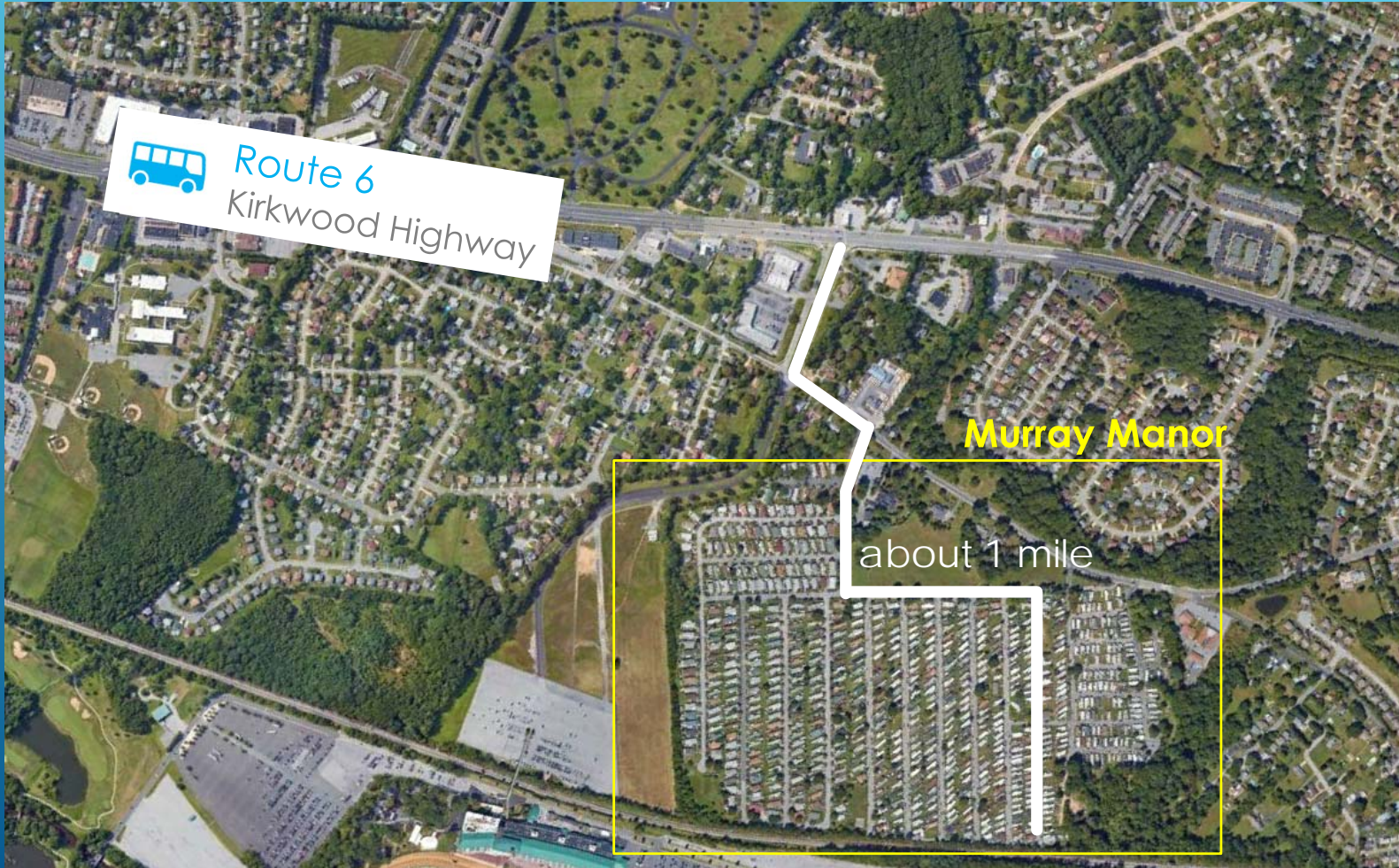
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WILMAPCO



FOOD DESERTS

Google Earth

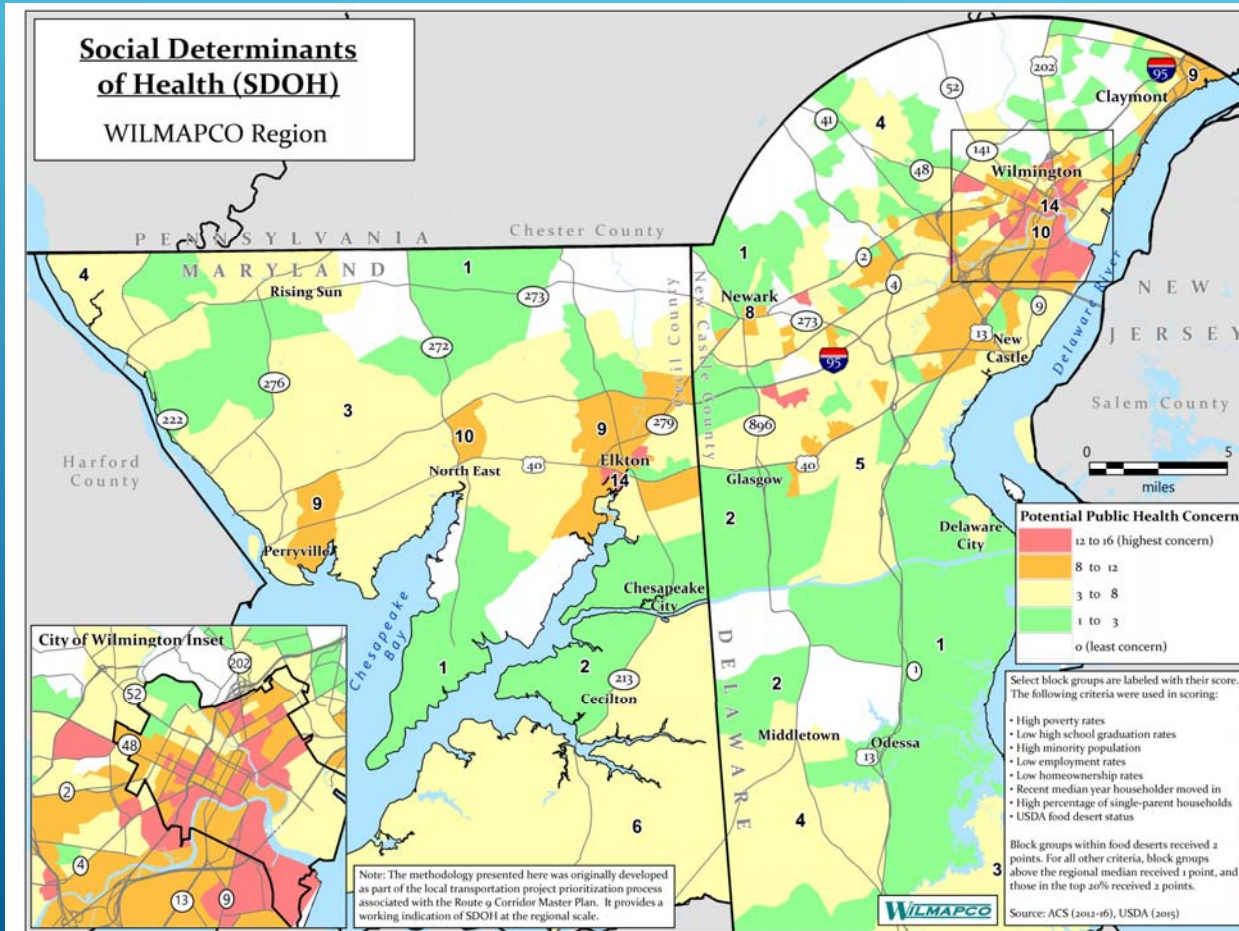


Google MyMaps

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SDOH Concern



Household
Poverty Rate



High School
Graduation Rate



Minority
Segregation



Employment
Rate



Homeownership
Rate



Householder
Tenure



Single Parent
Households

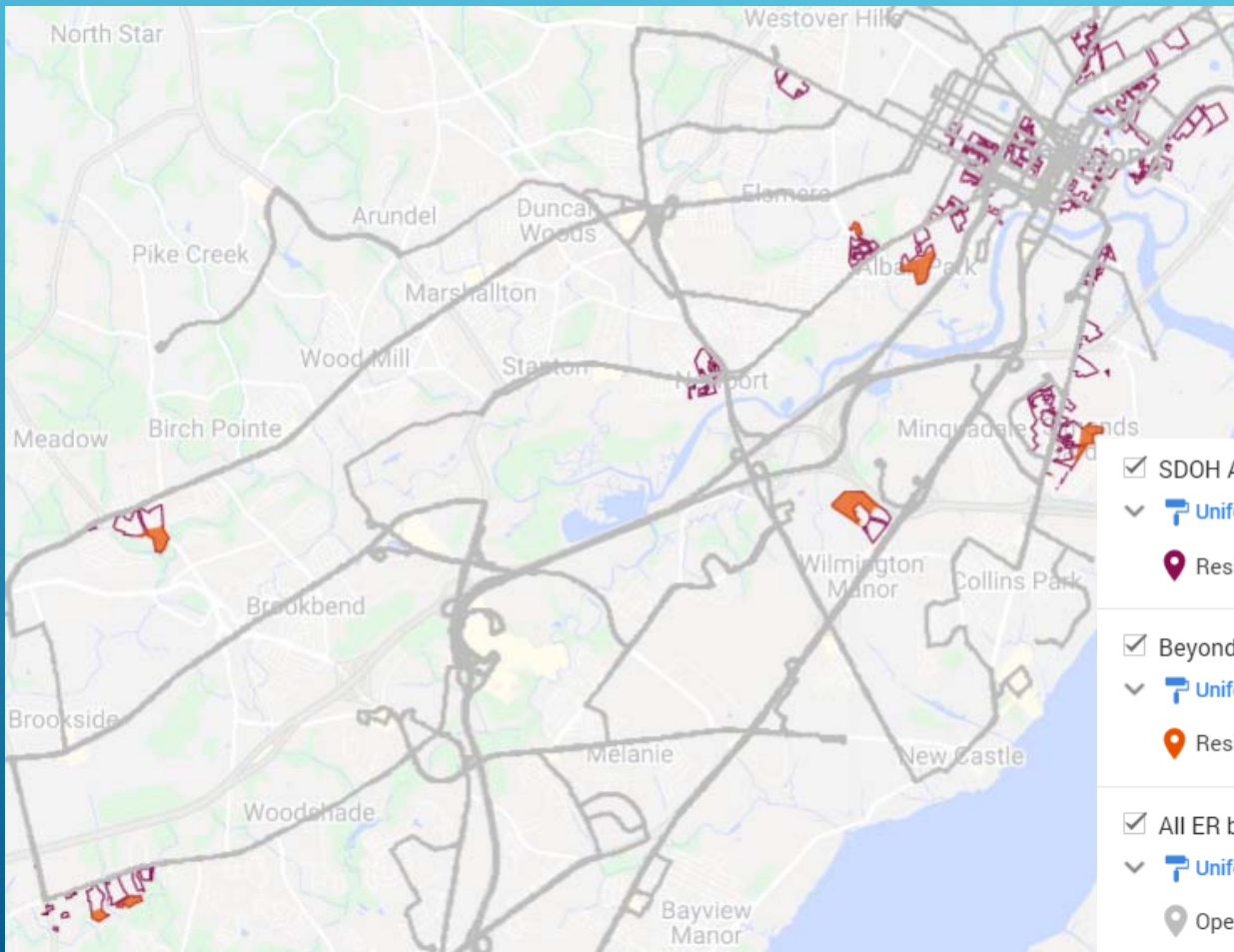


Food
Deserts



SDOH Concern

Google MyMaps



- ☒ SDOH Areas of High Concern
 - Uniform style
 - Residential areas (135)
- ☒ Beyond walking distance to bus
 - Uniform style
 - Residential areas (7)
- ☒ All ER bus routes
 - Uniform style
 - Operational bus routes (24)

NEW CASTLE CO.

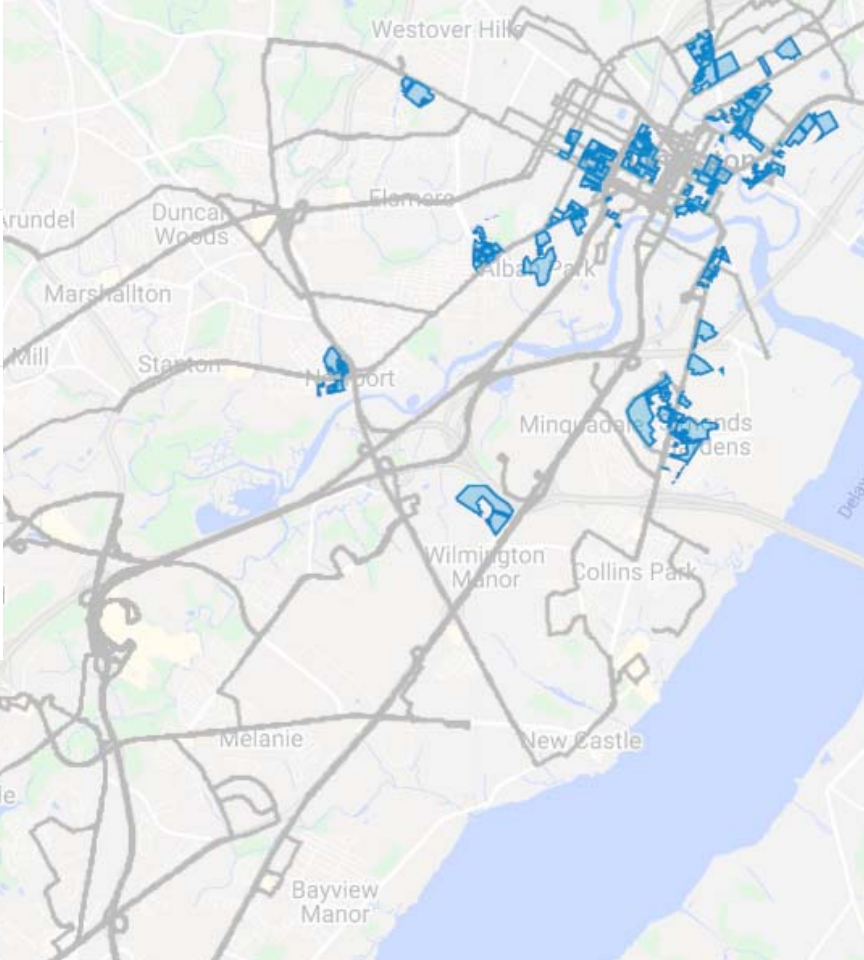
91% of households in areas of SDOH concern were within **WALKING DISTANCE** to bus service



SDOH Concern

Google MyMaps

- ☒ SDOH Areas of High Concern
 - ☒ Uniform style
 - ☒ Residential areas (135)
 - ☐ Beyond walking distance to bus
- ☒ All ER bus routes
 - ☒ Uniform style
 - ☒ Operational bus routes (24)
- ☒ About 1 bus every hour
 - ☒ Uniform style
 - ☒ SDOH areas of concern (10)
- ☒ About 1 bus every 30 min.
 - ☒ Uniform style
 - ☒ SDOH areas of concern (116)



NEW CASTLE CO.

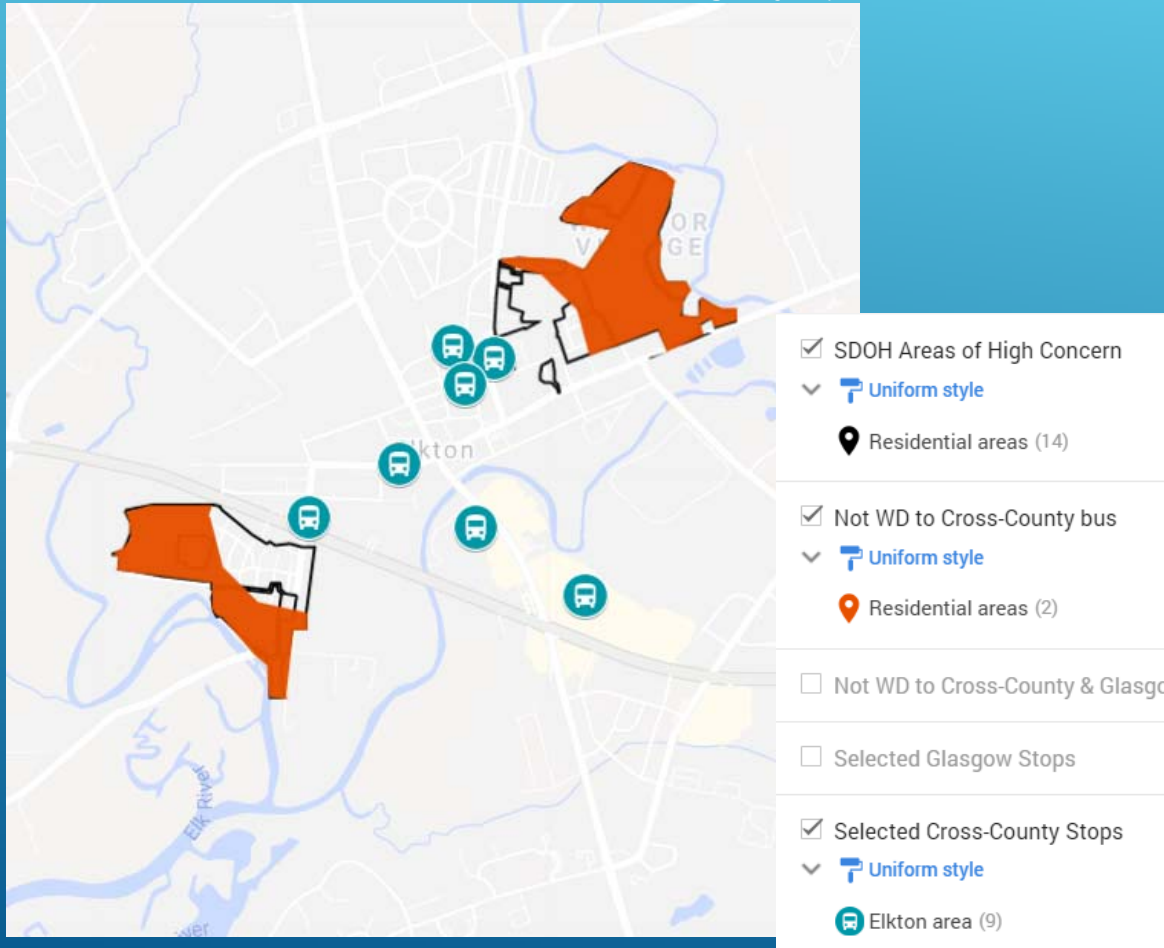
86%

of households in areas of SDOH concern have accessible, relatively **GOOD FREQUENCY** bus service



SDOH Concern

Google MyMaps



CECIL CO.

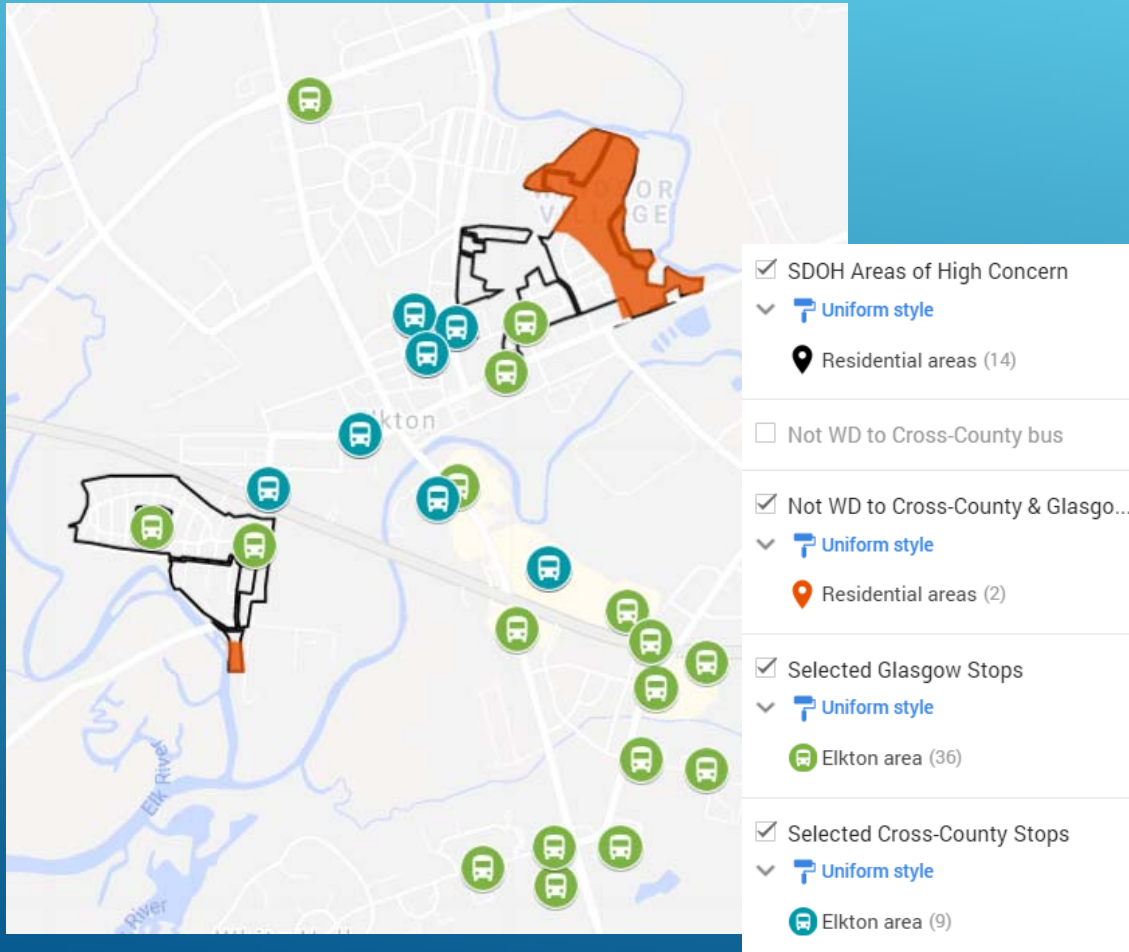
30%

of households in areas of SDOH concern were within **WALKING DISTANCE** to Cross-County bus service



SDOH Concern

Google MyMaps



CECIL CO.

78%

of households in areas of SDOH concern were within **WALKING DISTANCE** to Cross-County and Glasgow bus service



COVID-19 PANDEMIC

