

PRE-SCHOOL SITING AND AIR QUALITY LEVELS IN ATLANTA, GEORGIA

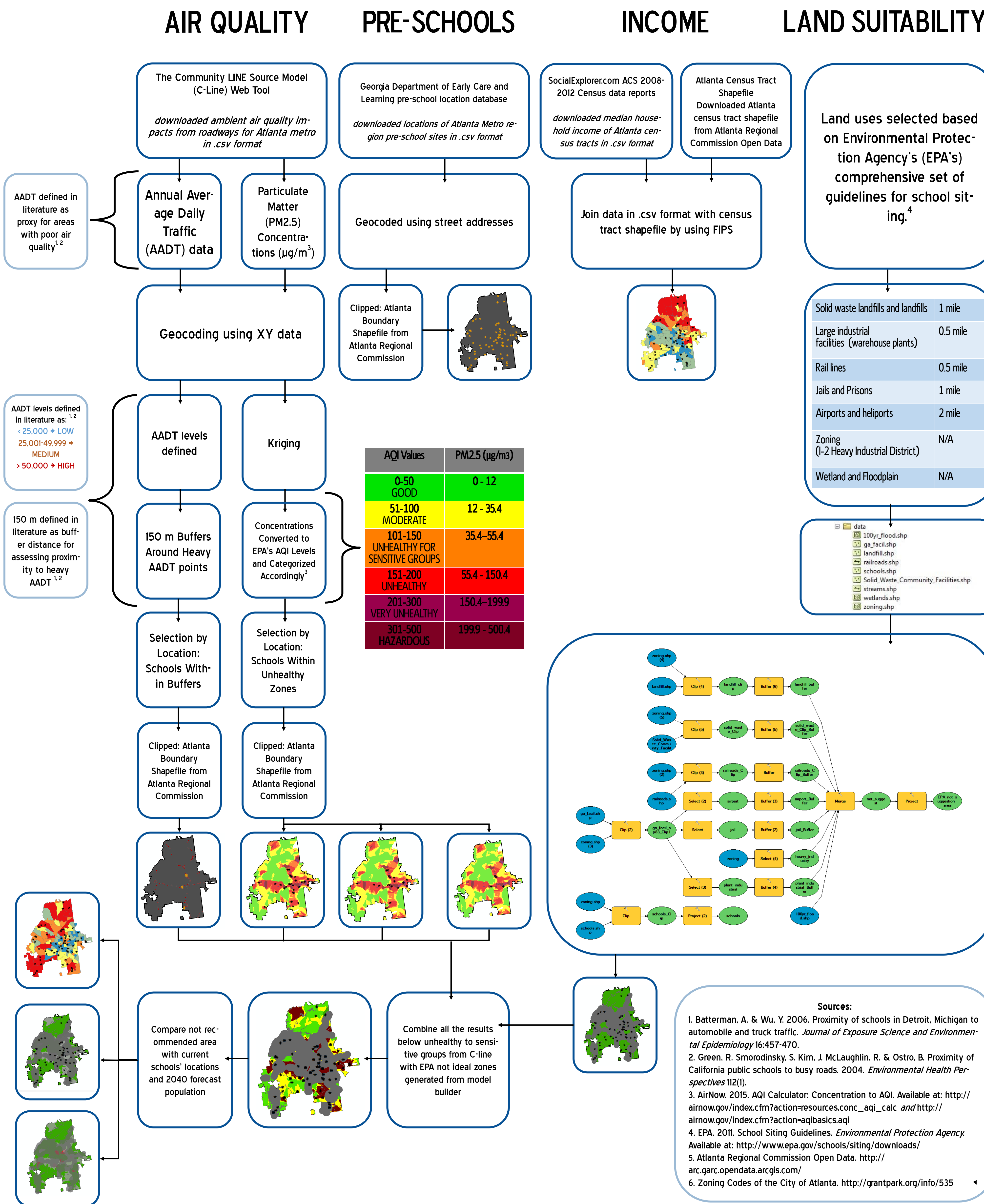
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PURPOSE:

The purpose of this project is to assess air quality levels in Atlanta in light of pre-school locations across the city. Air quality is a significant health and environmental issue, particularly in the Atlanta metropolitan region, and young children are an especially vulnerable population to its impacts. Thus, this analysis of pre-school sites in terms of their proximity to poor quality zones serves the threefold purpose of:

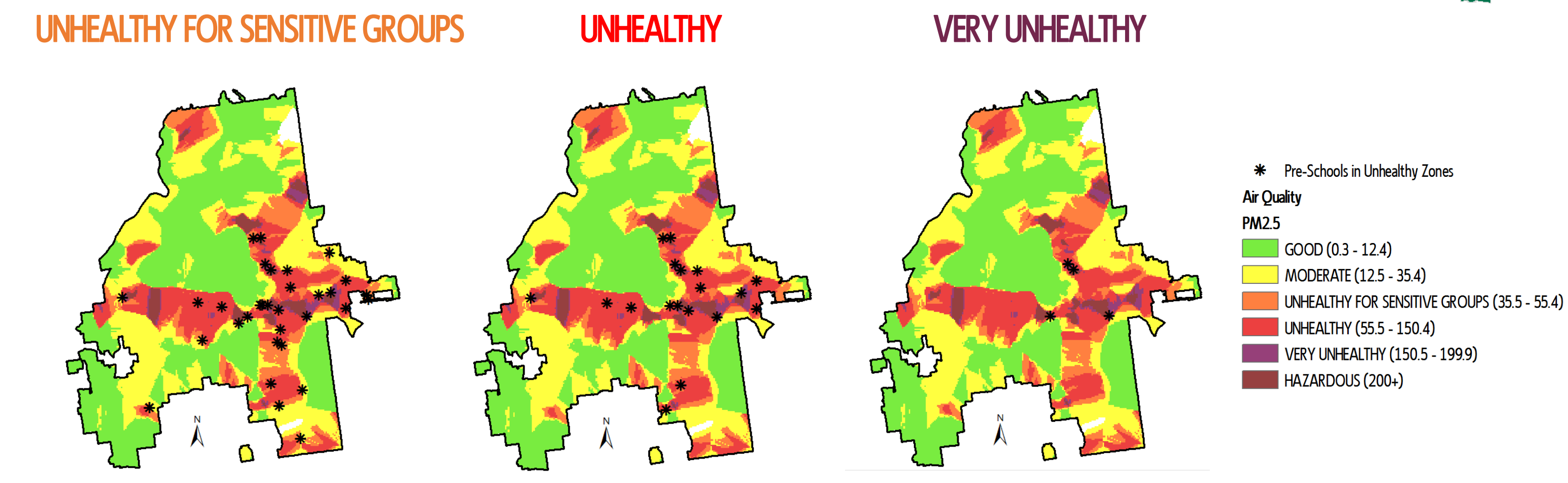
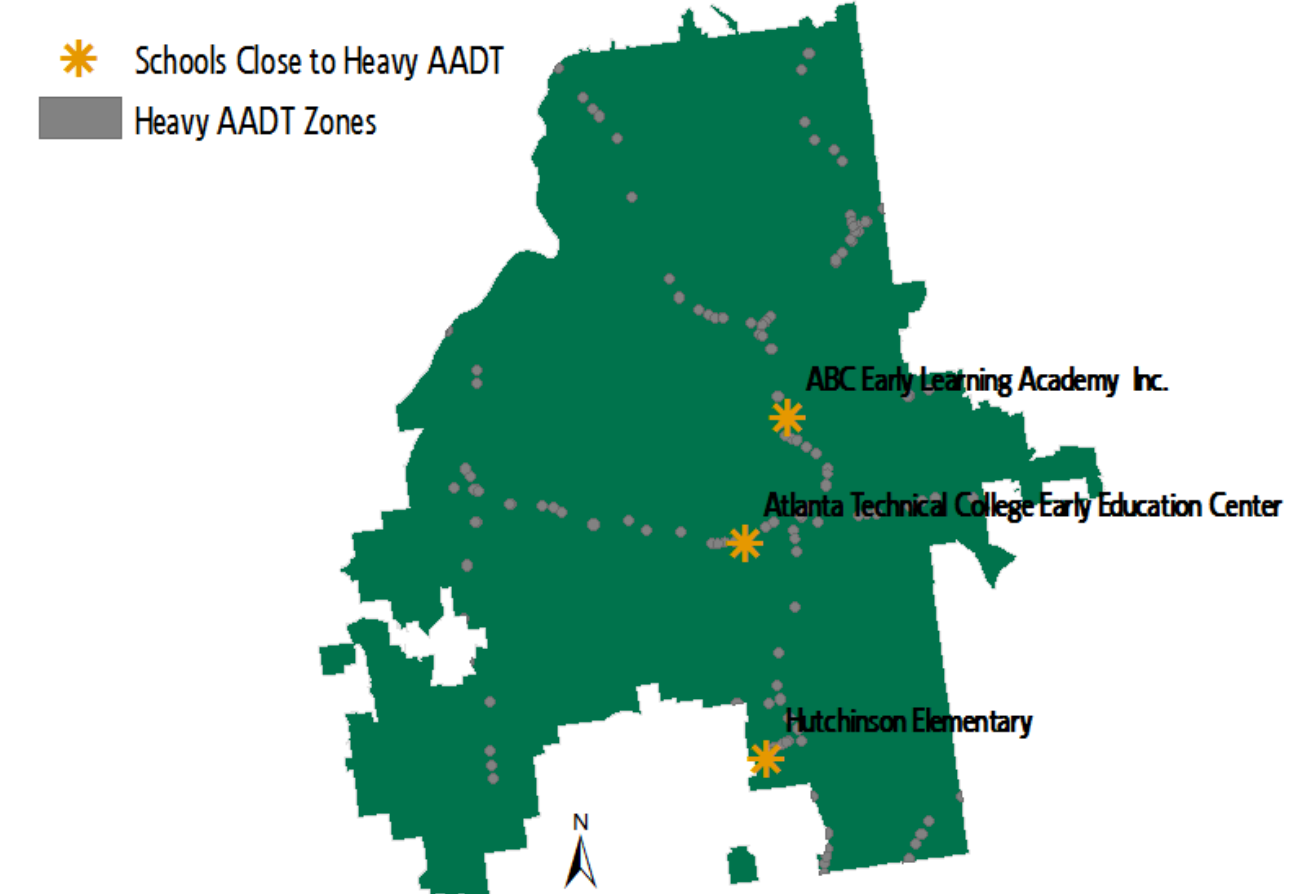
- 1) Improving local awareness for local education agencies about sites with the greatest need for mitigation strategies
- 2) Determining optimal future sites as they relate to both air quality as well as surrounding land uses
- 3) Evaluating correlations between vulnerable pre-school sites and income disparities of surrounding areas in order to inform policymakers about broader environmental justice issues in the City of Atlanta.

METHODOLOGY:

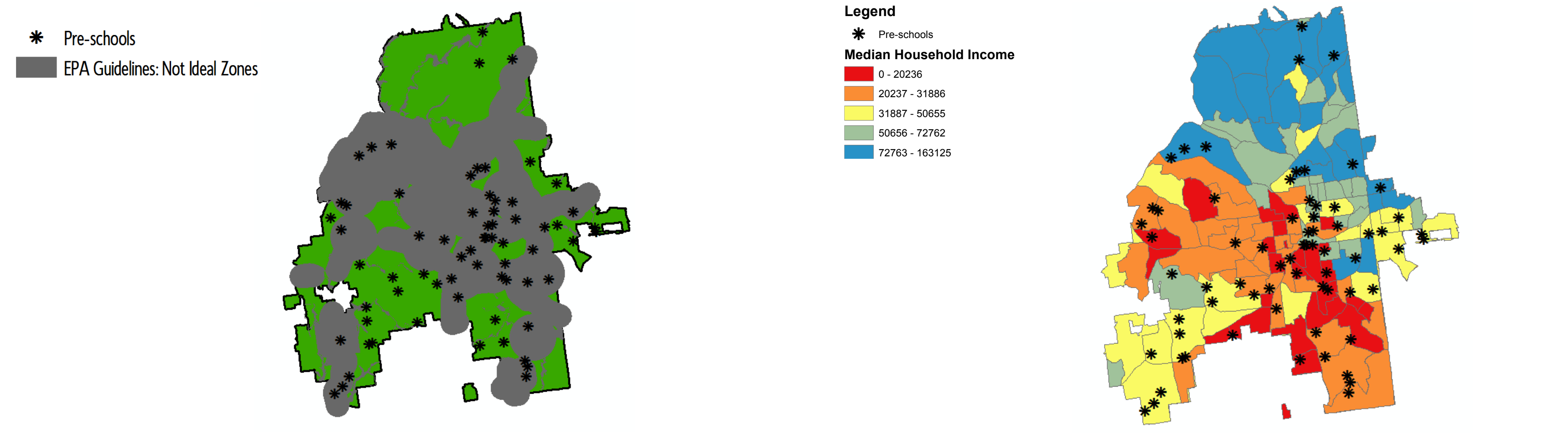


RESULTS: OF 71 ATLANTA PRE-SCHOOLS...

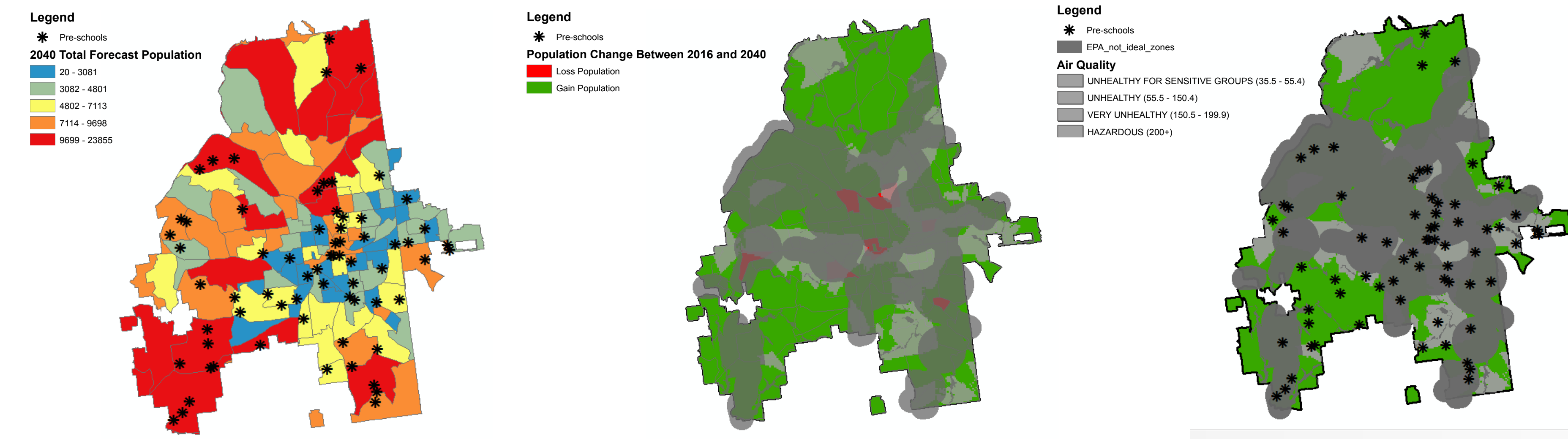
1. Three Atlanta pre-schools are located within close proximity (150 m) to areas with heavy AADT
2. A significant number of Atlanta pre-schools are located in unhealthy AQI zones, in terms of PM2.5 levels: 34 pre-schools are in zones considered to be UNHEALTHY FOR SENSITIVE GROUPS or worse 18 pre-schools are in zones considered to be UNHEALTHY or worse 4 pre-schools are in zones considered to be VERY UNHEALTHY



3. A significant number of pre-schools (41) are also located in areas that would be defined as unsuitable according to EPA's School Siting Guidelines:
4. A majority of pre-schools in unhealthy zones in Atlanta are located in census tracts of low median household income:



5. More than half schools located in area with high forecasting population (orange and red)
6. The area forecasted to loss population are in the not recommended area
7. More than half current schools located in the not recommended area



RECOMMENDATIONS/DISCUSSION:

1. EPA School Siting Guidelines should be incorporated into local policy to require healthier locations for pre-schools and to avoid future unsuitable pre-school sitings.
2. Develop and implement strategies among schools currently located in unhealthy AQI zones to mitigate the impacts of poor air quality. Particular and most immediate consideration should be given to pre-schools in very unhealthy PM2.5 zones: ABC Early Learning Academy Inc., Atlanta Technical College Early Education Center, Parkside Elementary, and Renaissance Learning Center.
3. Environmental policy and guidelines about school siting in the City of Atlanta should give greater consideration to issues of social disparities and environmental justice in order to work towards a healthier and more equitable city, particularly for the most vulnerable populations.
4. City of Atlanta decision-makers should consider the broader implications of this analysis in terms of recognizing that a large percentage of land in the city is environmentally unsuitable for vulnerable populations.