Citizen Science and Community Monitoring: Tools for Community Revitalization

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Community Environmental Challenges

- Intermodal Container Transfer Facility
- South Carolina Port Terminal
- Train Tracks
- Port Access Road
- Interstate 26
LAMC Organization’s Purpose and Work

**Our purpose:** is to build healthy families by creating pathways to equal opportunities

**Our work:** is intentional and transformative

**Our focus:** is **7 : 4**

7 Communities : 4 Core Areas of Focus

- Accabee
- Chicora/Cherokee
- Five Mile
- Liberty Hill
- Union Heights
- Howard Heights
- Windsor Place

Affordable Housing

Economic Development

Education

Environmental Justice
PURPOSE
Examine how land use policy and practices in North Charleston are contributing to or relieving community’s risk of exposure to environmental hazards associated with land use types that are incompatible with residential such as industrial and heavy commercial.

KEY FINDINGS
The neighborhoods at highest risk of exposure to adverse environmental effects are at the Southern end of the study area and include: Accabbee, Five Mile, Howard Heights, Windsor Place and Union Heights.

Contemporary land use practices and decisions are exacerbating pre-existing disparities evidenced by:
- Amount of land use types incompatible with residential are increasing within and surrounding the subject neighborhoods and heightening their vulnerability to effects of environmental hazards, air pollution, urban decay, man-made and natural disasters.
- Neighborhoods in the northeast corner of the study area that skew more white and affluent are seeing a reduction in impact as a result of the effects of protective overlay districts and down-zoning.

METHODS
1) Analysis of zoning policy and classification of current zoning types and land use categories by “impact factor,” (impact defined as adverse environmental effects)

2) Spatial analysis using ArcMap v10.4 to assess:
   - Distribution of land use types
   - Patterns in land use decisions over time
   - Areas of heightened risk of exposure

STUDY AREA
Seven focus neighborhoods of the Charleston Community Research to Action Board (CCRAB) in North Charleston, SC.

To view results in map viewer, visit: https://arcg.is/1Gfj4q
Figure 2. Scale of impact classification system with images of corresponding land uses in North Charleston, SC.
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