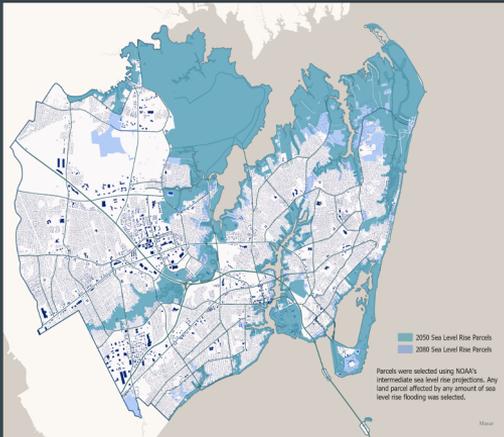


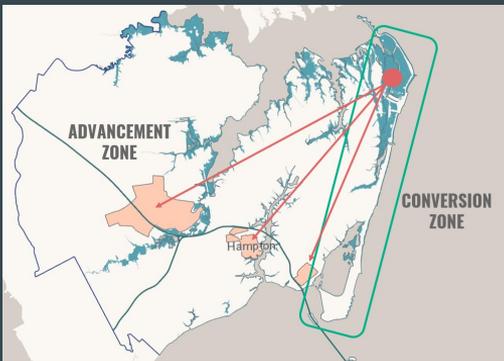
Undergraduate Students | Cameron Bruce - Geography | Laura Bordelon – Geography | Caroline Smith - Urban Affairs and Planning | Lechuan Huang - Urban Affairs and Planning | Max Dillon - Urban Affairs and Planning | **Graduate students** | Sarah Carey | Margaret Crawford, Jack Gonzales - all Geography | **Faculty leads** | Anamaria Bukvic – Geography | Thomas Pingel – Geography | Theodore Lim - Urban Affairs and Planning | Klaus Moeltner - Agricultural and Applied Economics |



CONCEPTUAL FRAMEWORK

STATEMENT OF THE PROBLEM | Some areas of Hampton will be permanently inundated by 2050 sea level rise (SLR), prompting the relocation of residents, infrastructure, and assets.

DESIGN SOLUTION | Using elevation-based zoning, we identified a dry Advancement Zone in Hampton that could be redeveloped using mixed-use modern urban forms to provide appealing housing options to people who have to relocate. The areas claimed by SLR would be transformed into the Conversion Zone with new ecological, educational, and recreational opportunities that would bring new revenues to the city and improve the quality of life. This approach would be a WIN-WIN long-term solution to the problem of accelerated flooding in Hampton.



ADVANCEMENT ZONE



CONVERSION ZONE

- SOCIETAL BENEFITS**
Plan recreation, education, health and walking, safety, access, community
- ECONOMIC BENEFITS**
Tourism, investment, real estate values, energy production, businesses, jobs
- FLOOD PROTECTION**
Erosion control, storm surge buffer, water storage, sea level rise



ECONOMIC ASSESSMENT

Total losses in billions 2050

Total benefits in millions 2050

\$1.73

- Homes
- Commercial buildings
- Open space
- Critical facilities

\$233.6

BENEFITS

- Form-based re-zoning to create walkable communities
- Alignment with the Hampton's Master Plan
- Reduced risk to SLR and other coastal hazards
- Matches socio-economic needs with housing types
- Provision of desirable urban features e.g. green space