

### URBAN MORPHOLOGY EVOLUTION UNDER UNCERTAIN LAND CONSTRAINTS AND CLIMATE EXTREMES

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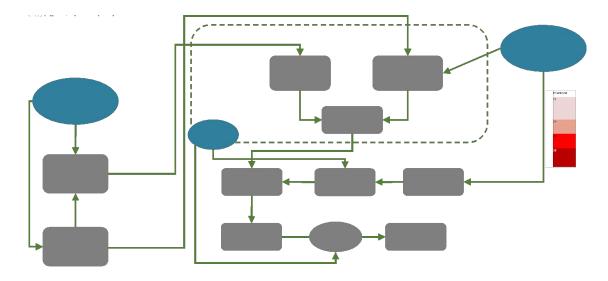






## **IM3** OBJECTIVES AND METHODS

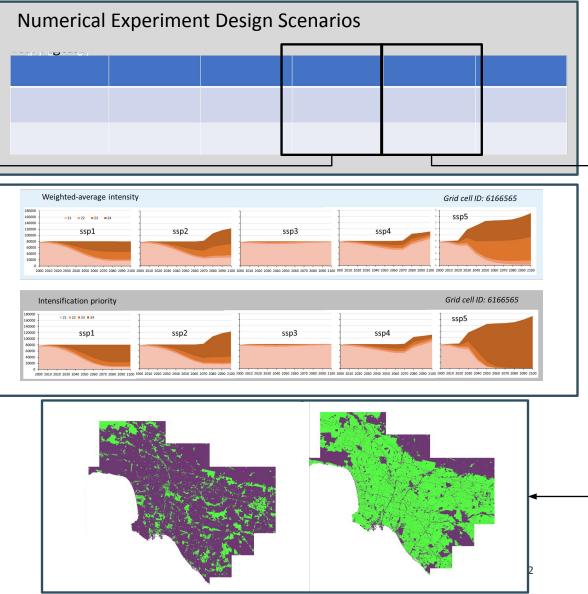
Urban HYBRD (<u>HYB</u>rid <u>R</u>egional <u>D</u>ownscaling) Model Framework



#### **Objectives:**

Apply HYBRD in two case studies of different city contexts to understand:

- 1) Strength of localized controls and contextualized constraints on downscaling results
- 2) Examine the relative strength of exogenous socioeconomic drivers versus localized constraints (e.g., zoning or climate hazards) on future urban morphology projections



IM<sub>3</sub> RESULTS

#### Baltimore, MD

2001

NLCD

SSP5 2100 Low zoning

SSP5

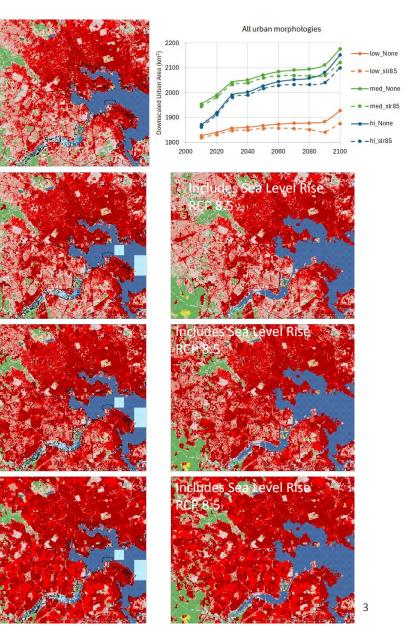
2100 Med zoning

SSP5

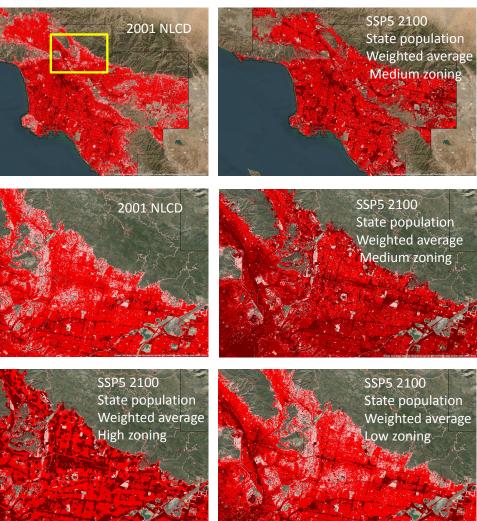
2100

High

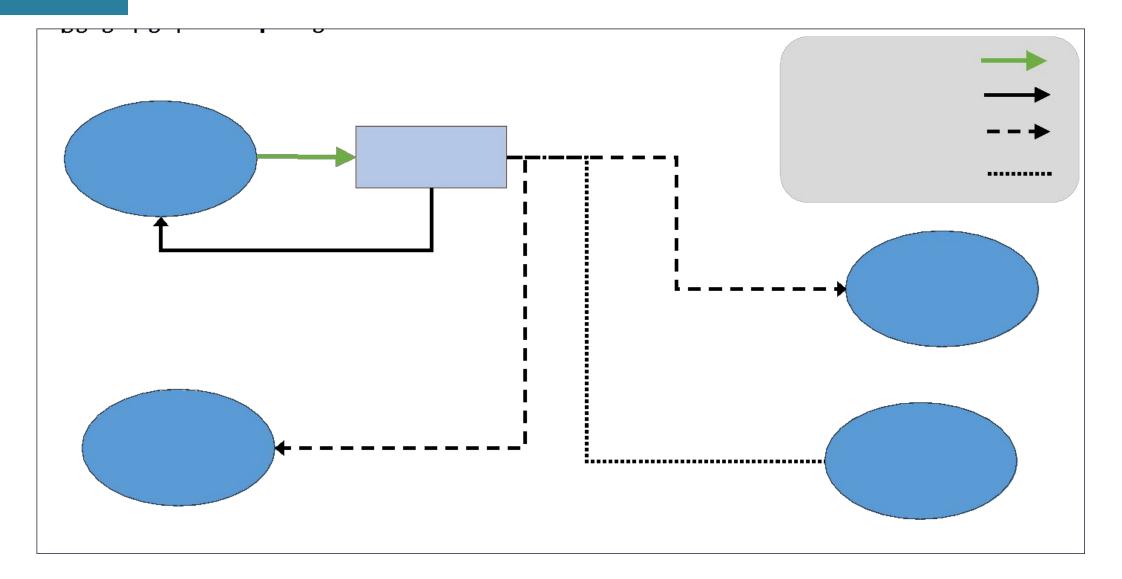
Zoning



#### Los Angeles, CA









# INTEGRATED MULTISECTOR MULTISCALE MODELING

