

Sea-Level Hi-Rise! The Waterfront Adaptation Board Game

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The issues presented by sea level rise along the urban edge of coastal cities involve a complex series of challenges including: regional versus local governance, built versus natural environment, vulnerable local and regional infrastructure, diverging interests with diverse stakeholders, and population growth. With each possible future scenario come multiple outcomes with winners and losers. How can the best policy and design be selected and tested? How will communities learn about different options and strategies for adaptation and be empowered to act? To address the pressing problems for coastal adaptation in response to climate change, ecological degradation, and urban growth, this project suggests that game play can inspire creative communication and collective optimism.

The Sea-Level Hi-Rise Board Game comes in a convenient and easily transportable portmanteau suitcase, which contains all of the game pieces, cards, and instructions for play. Maps from different cities can be placed under the board game surface, which will affect game play and strategy based on the past, present, and future site conditions. Stakeholders or “players” may include local government officials, residents, developers, environmentalists, etc. As sea levels rise, will the players choose collaborate and create a shared vision for a resilient waterfront community, or will they follow their own divergent interests? Players will have the ability to shape the future of their community with adaptation strategy cards and game pieces that include housing development, shoreline protection, wetlands restoration, and public infrastructure in response to chance event cards related to the economy, governance, and environment.

SEA-LEVEL HI-RISE! THE WATERFRONT ADAPTATION BOARD GAME

I'M GOING TO MAKE AS MUCH MONEY AS POSSIBLE WITH NEW HIGH DENSITY DEVELOPMENT.



\$1000K
4x



MY GOAL IS TO INCREASE THE QUALITY OF LIFE WITH LOW DENSITY DEVELOPMENT, BIKE AND PEDESTRIAN FRIENDLY ROADS, AND PUBLIC PARKS.

10x
10x 50% 50%



MY AIM IS TO CREATE TRANSIT ORIENTED DEVELOPMENT TO ATTRACT TECH COMPANIES FOR TAXES TO PAY FOR RESILIENT SHORELINE INFRASTRUCTURE.

4x
3x TAXES

I WILL REMOVE PARCELS AT RISK OF FLOODING FROM SEA LEVEL RISE, USE GRANT MONEY TO BUILD TIDAL WETLANDS AND PROTECT NATIVE SPECIES.



20x
REMOVAL

GAME PLAY... START!

EACH ROUND, PLAYERS ROLL THE DICE AND MOVE ALONG THE TRACK REPRESENTING A MOVEMENT FORWARD IN TIME...

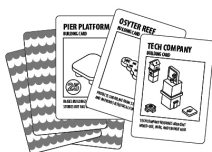
...PLAYERS CAN PLAY GAME PIECES ON THE GRID AND TAXES ARE COLLECTED BY THE MAYOR.

CHANCE EVENT CARDS:



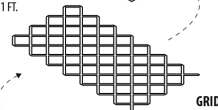
EVENT CARDS INTRODUCE AN ELEMENT OF CHANCE THAT MAY HELP OR HINDER INDIVIDUAL AND SHARED GOALS.

ADAPTATION STRATEGY CARDS:



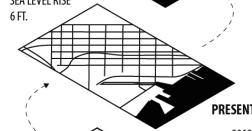
FINISH!

TRACK:
REPRESENTS TIME - EACH LAP SEA LEVEL RISES 1 FT.

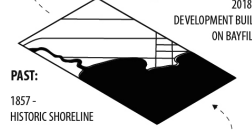


GRID:
TRANSLATES "REAL" WORLD TO "GAME" SPACE

FUTURE:
2100 - SEA LEVEL RISE 6 FT.



PRESENT:
2018 - DEVELOPMENT BUILT ON BAYFILL



PAST:
1857 - HISTORIC SHORELINE

MAPS + GAMEBOARD:

- BUILDINGS:** COMMERCIAL, CIVIC, RESIDENTIAL, FACTORY, ADDITION, TECH COMPANY
- TRANSPORTATION / PUBLIC SPACE:** TRANSIT HUB, BRT/TRANSIT, BIKE / PED, LIGHT RAIL, PARK
- ADAPTATION STRATEGIES:** HORIZONTAL LEVEE, SUPER LEVEE, LEVEE, PIER PLATFORM, FLOATING
- ENVIRONMENT:** SHALLOW WATER, MEDIUM WATER, DEEP WATER, WETLAND, OYSTER REEF

