MIAMIBEACH
RISING
ABOVE

MIAMI BEACH BUSINESS CASE ANALYSIS OF THE STORMWATER PROGRAM

Key Questions to Answer

- What is the effectiveness of the City's planned infrastructure improvements (e.g., raising roads, increasing drainage capacity) at reducing flood risk?
- How much would additional private sector investments in flood mitigation reduce flood risk overall?
- What is the effect of these investments on property values?
- What are the other benefits of reduced flooding?
- Overall, what is the business case for public and private sector stormwater resilience investments?

Business case components:

- Expected losses/property damage
- Changes in property values
- Insurance premiums
- Property tax revenues
- Tourism revenues
- Operational/response costs
- Traffic disruptions
- Business closures
- Resilience construction

INTERDISCIPLINARY EVALUATION COMMITTEE

Team Roles

- Overall project management, vision, oversight
- Property value analysis
- Economic analysis

- Citywide risk modeling
- Expected damages
- Flood risk effects on insurance premiums

- Integrated flood modeling

- Communications
- Adaptation strategies for individual property owners

- Support property value analysis
- Qualitative analysis
- Advisory support

FUNDING

POOL OF QUALIFIED CONSULTANTS

-Top ranked

WOOD
AECOM
BALMORAL GROUP
HAZEN AND SAWYER
CH2M HILL (JACOBS)
ARUP

Scope of Work

Stage 1

Stage 2

Stage 3

Stage 4

T1 – User Engagement and Data Collection

- Documentation of user needs
- Data inventory

T2 – Citywide SLR and Storm Surge Risk Model

- Expected annual coastal flood losses w/ and without SLR
- Extent and depth of surge under various scenarios

T3 – Integrated Flood Modeling (First Street neighborhood)

- Inundation extents/depths under baseline, public investment, and private investment scenarios

T4 – Determine Property Value Impacts

- Hedonic pricing model linking property values to flood risk to property and nearby roads

T5 – Individual Property Business Case

- Calculate costs and benefits of different homeowner resilience investment options

T6 – Neighborhood-level Business Case

- Calculate costs and benefits of public and private resilience investment options

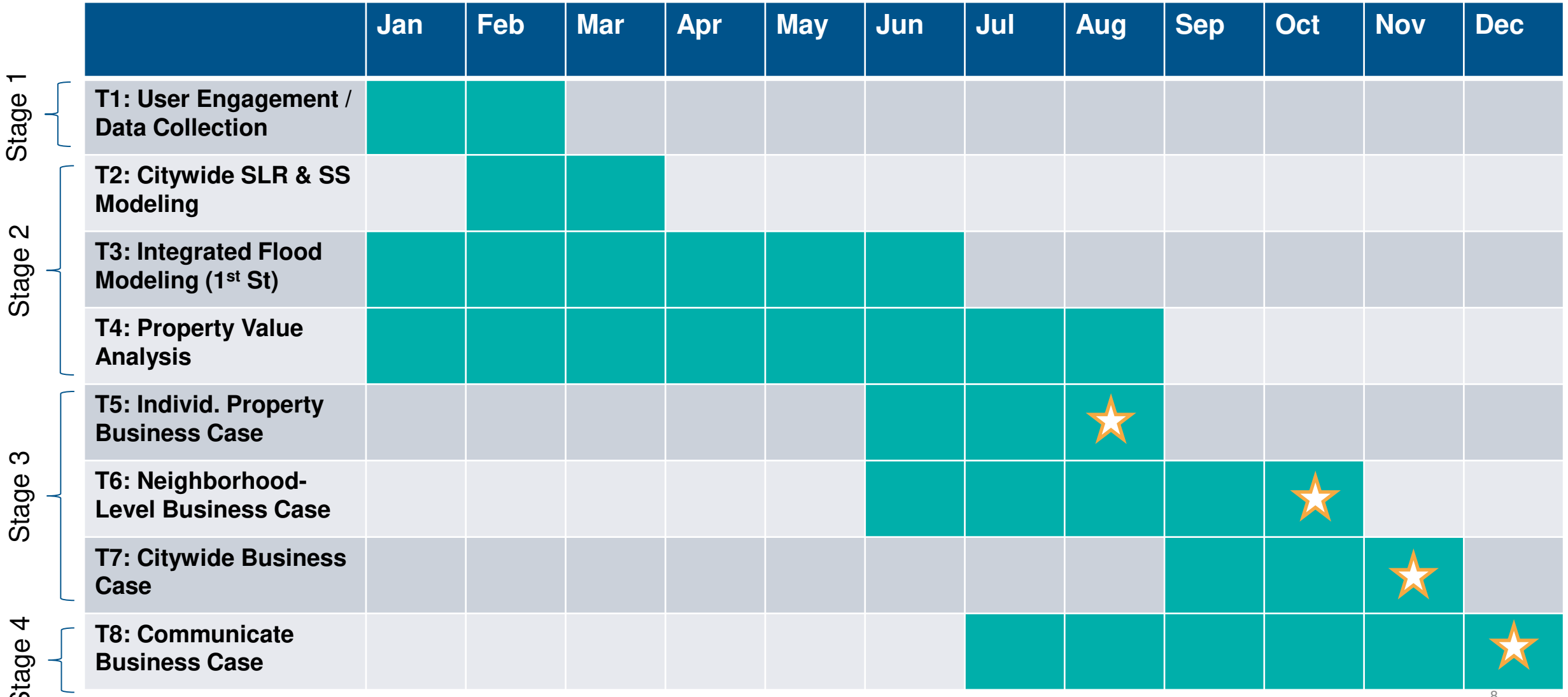
T7 – Citywide Business Case

- Estimate Citywide cost of inaction; appropriate level of investment in resilience

T8 – Communicate Business Case

- Communication products (2-pager, presentation)

Schedule


Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Stage 1
T1: User Engagement / Data Collection
Stage 2
T2: Citywide SLR & SS Modeling
T3: Integrated Flood Modeling (1st St)
T4: Property Value Analysis
Stage 3
T5: Individ. Property Business Case
T6: Neighborhood-Level Business Case
T7: Citywide Business Case
Stage 4
T8: Communicate Business Case

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THANK YOU!

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