Working Group Ground Rules

1. Everyone’s input is equally valued
2. Respect differences, and appreciate other points of view
3. Ask genuine questions
4. Stay engaged
5. Everyone contributes to our success
6. Expect and accept that this work is ongoing
Agenda

9:00  Presentation: background and vulnerability assessment
9:20  Presentation: OLUs
9:35  Presentation: vulnerability assessment results

15 min stretch break

10:05  Exercise: Identifying shared vulnerabilities + report out
11:05  Presentation: Natural Capital Project analysis
11:20  Presentation: RISER SF Bay
11:45  Wrap-up and Next Steps
Project Partners

- Agency staff
  - Caltrans (funder, along with BATA)
  - MTC (grant recipient)
  - BARC (project manager)
  - BCDC ART team

- Consultant team
  - AECOM
  - Natural Capital

- Stakeholders
  - Regional Working Group
  - Public
Focus Areas

Transportation infrastructure

Priority Development Areas (PDAs)

Vulnerable Communities

Priority Conservation Areas (PCAs)
Leverage completed/ongoing projects

- Previous ART projects
- Stronger Housing, Safer Communities
- Marin BayWAVE
- Sea Change San Mateo
- San Francisco SLR Action Plan
- Silicon Valley 2.0
- Coastal Conservancy’s Climate Programs
- Baylands Ecosystem Habitat Goals Update
- And many more!
Project Goals

- Complete comprehensive regional-scale vulnerability assessment
- Establish framework for ongoing regional-scale adaptation planning
- Increase public participation and local capacity to engage in planning and implementation over long term
- Coordinate with partners to apply project results to related efforts, such as MTC’s Horizon effort and the 2021 update of Plan Bay Area
**Project Timeline**

- **RWG 3**
  - Fall 2017 - Summer 2018
  - Conduct Assessments
    - Sub-regional meetings to review draft findings with Regional Working Group

- **RWG 4**
  - Fall 2018
  - Transition to Adaptation

- **RWG 1**
  - Project Initiation and Scoping
    - Fall/Winter 2017

- **RWG 2**
  - Determine Assessment Outcomes and Draft Indicators
    - Summer/Fall 2018

- Winter/Spring 2019
  - Finalize Indicators and Framework

- Fall/Winter 2018-2019
  - Develop Adaptation Responses

- Spring/Summer 2019
  - Evaluate and Prioritize Adaptation Responses and Identify Opportunities for Implementation
Basic Vulnerability Assessment method:

- Select individual assets to assess
- Complete vulnerability assessment questionnaires
- Interview asset managers and other experts
- Synthesize outcomes
- Use framework to rank the most critical vulnerabilities to address in adaptation planning phase
Project Timeline – Assessments

Basic Vulnerability Assessment method:
- Select individual assets to assess
- Complete vulnerability assessment questionnaires
- Interview asset managers and other experts
- Synthesize outcomes
- Use framework to rank the most critical vulnerabilities to address in adaptation planning phase
Transportation
Transportation

• Covering major categories of transportation infrastructure

• Focusing on disruptions to the region that can occur from flood impacts

• Coordinating with related efforts, e.g., Caltrans District 4, MTC ABAG Travel model, Mark Stacey’s work
Priority Conservation Areas (PCA)
Priority Conservation Areas (PCA)

- Answering regional questions about PCA program goals
- Coordinating with PCA Program staff
- Researching a representative subset of PCAs
- Partnering with NatCap
Priority Development Areas (PDA)
• Coordinating closely with MTC Horizon effort
• Researching subset of PDAs that score highly in MTC’s analysis against PDA program goals
Vulnerable Communities

Methodology: Community indicators represent characteristics that may reduce ability to prepare for, respond to, or recover from a hazard event. Indicators are counted for Census Block Groups with rates in the 70th percentile, relative to the nine county Bay Area. This dataset was first developed as part of the ARAU and BEES Stronger Housing, Safer Communities Project.

Data: 2012-2016 American Community Survey, Esri

Indicators include populations or households which are:
- Retirees
- Under 5
- 75 and over
- Very low income
- Without a vehicle
- People with disability
- Single-parent families
- Communities of Color
- Housing cost burdened
- Limited English proficiency

San Francisco Bay Community Vulnerability
Number of Indicators: 3-4 5-6 7+
Vulnerable Communities

- Selected communities with characteristics that reduce ability to prepare for and respond to flooding
  - Social vulnerability indicators
  - Highest land contamination score
  - Overlap with complementary community vulnerability screening tools
Case studies on transportation, PCAs, PDAs, and communities

- Orange = Transportation Assets
- Purple triangle = PDA Assets
- Green rectangle = PCA Assets
- Red circle = Vulnerable Communities Assets
How can we best organize our results to best illustrate the interconnected nature of assets, and the significance of potential flood impacts to the region?
Case studies on transportation, PCAs, PDAs, and communities

- **ART Bay Area**
- **Transportation Assets**
- **PDA Assets**
- **PCA Assets**
- **Vulnerable Communities Assets**
Case studies on the interrelated assets within a geographic unit.
Reorganizing the assessment

Organizing vulnerability assessment results by geographic units:

- Allows us to highlight connections between assets
- Avoids talking about assets in silos
- Illustrates the various parties that could come together to implement solutions
- Allows us to examine more than just our 4 asset categories
- Sets us up to identify sets of problems that can be solved by single adaptation solutions
- Suits the goal of this project to identify regionally significant adaptation strategies
Can we aggregate information by OLU?

OLU = areas with shared geophysical and land use characteristics suited for particular sets of adaptation strategies areas
OLUs as an organizing principle

OLUs provide:

- Convenient geographic unit to start grouping vulnerability assessment results
- Geographic units with shared physical and land use characteristics that lend themselves to certain sets of adaptation strategies
- A geographic framework being used in other projects regionwide, such as work in San Mateo and Marin, and work by Mark Stacey
- A way to reorganize our research rather than substantively changing it
We will start by synthesizing vulnerability assessment results for

- 13 OLUs
- With all four asset categories (transportation, PCAs, PDAs and vulnerable communities)
- And geographic spread