

Adapting to Rising Tides

Bay Area

Bay Conservation and Development Commission Update
July 19, 2018



Bay Area
**Regional
Collaborative**

Project Partners

ART Bay
Area

- Agency staff
 - Caltrans (funder, along with BATA)
 - MTC (grant recipient)
 - BARC (project manager)
 - BCDC ART team
- Consultant team
 - AECOM
 - Natural Capital
 - BARHII
 - Co-Urbanize
- Stakeholders
 - Regional Working Group
 - Public



Focus Areas

ART Bay
Area

Transportation infrastructure



Priority Development Areas (PDAs)



Vulnerable Communities



Priority Conservation Areas (PCAs)



Collaboration

ART Bay Area

Leverage completed/ongoing projects

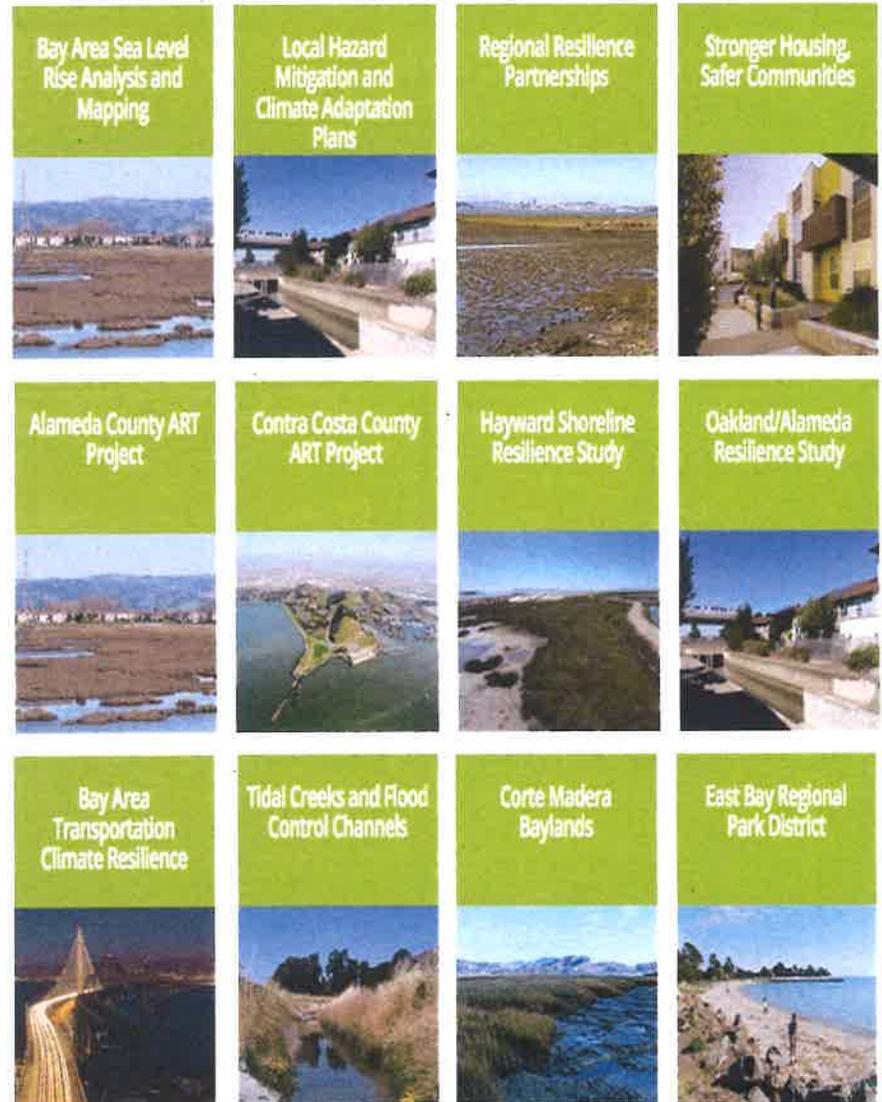
- Previous ART projects
- *Stronger Housing, Safer Communities*
- Marin BayWAVE
- Sea Change San Mateo
- San Francisco SLR Action Plan
- Silicon Valley 2.0
- Coastal Conservancy's Climate Programs
- Baylands Ecosystem Habitat Goals Update
- Horizons/Futures
- And many more!

RESILIENT

BAY AREA CHALLENGE

BY

DESIGN



Project Goals

ART Bay
Area

- 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 – Assessments

ART Bay
Area



Fall 2017 -
Summer 2018

Conduct Assessments

Sub-regional meetings to review draft findings with Regional Working Group



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

ART Bay
Area



Fall 2017 -
Summer 2018

Conduct Assessments

Sub-regional meetings to review draft findings with Regional Working Group

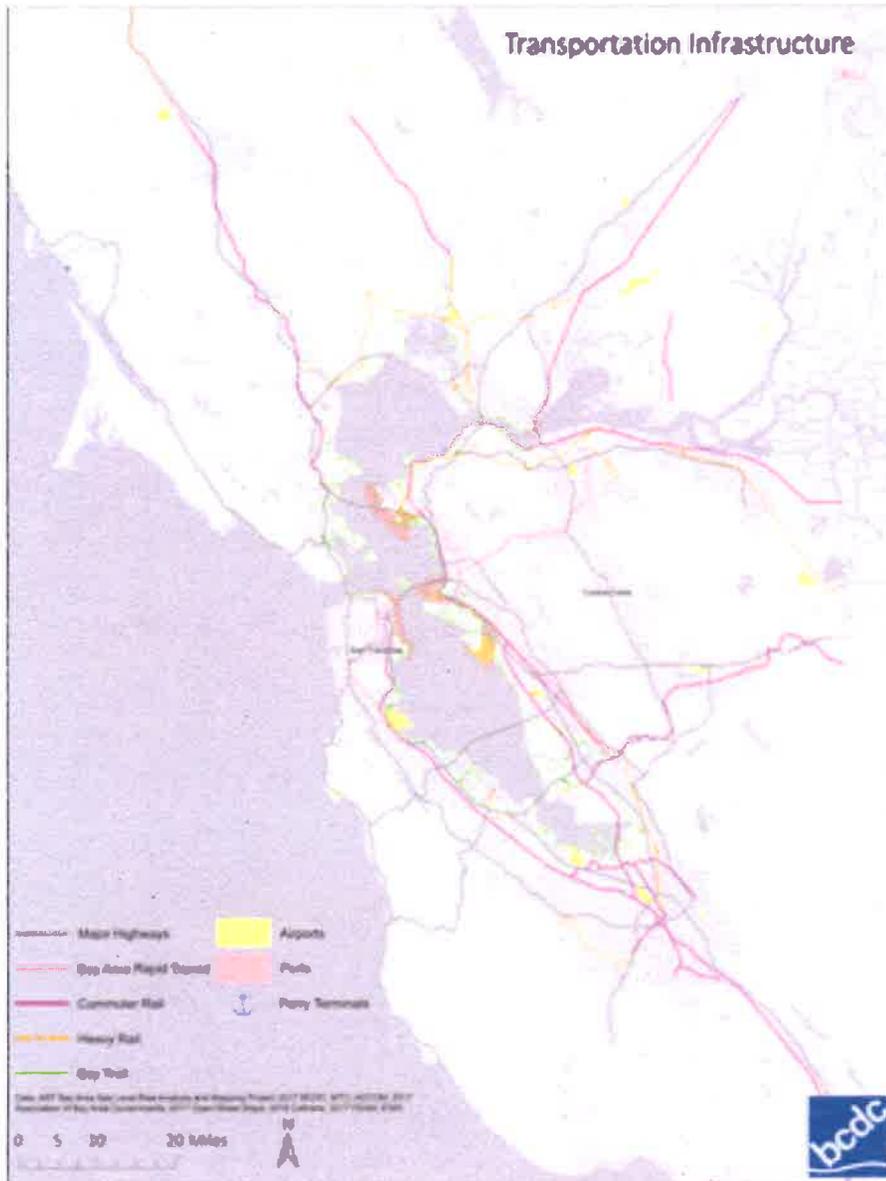


Basic Vulnerability Assessment method:

- 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

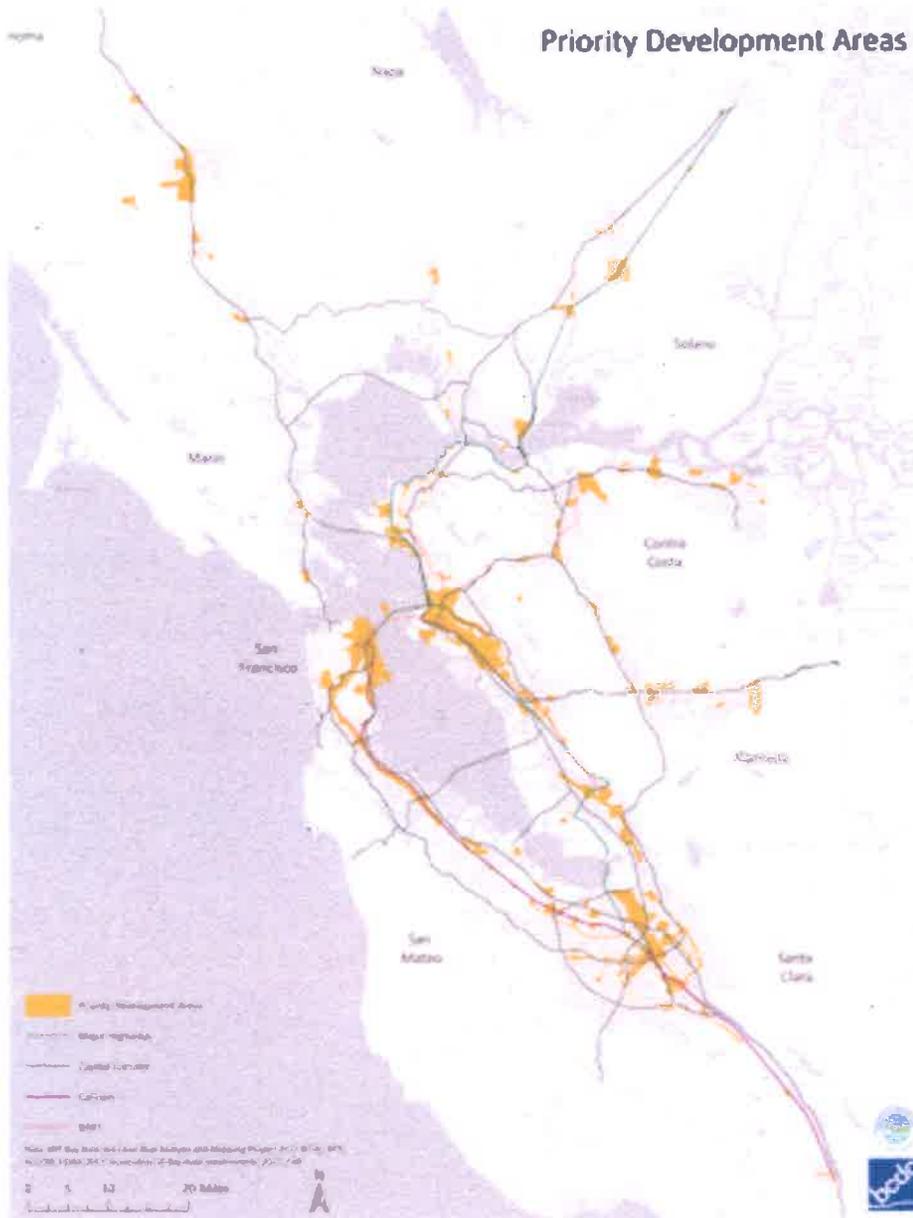
ART Bay
Area



- 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 Development Areas (PDA)

ART Bay Area

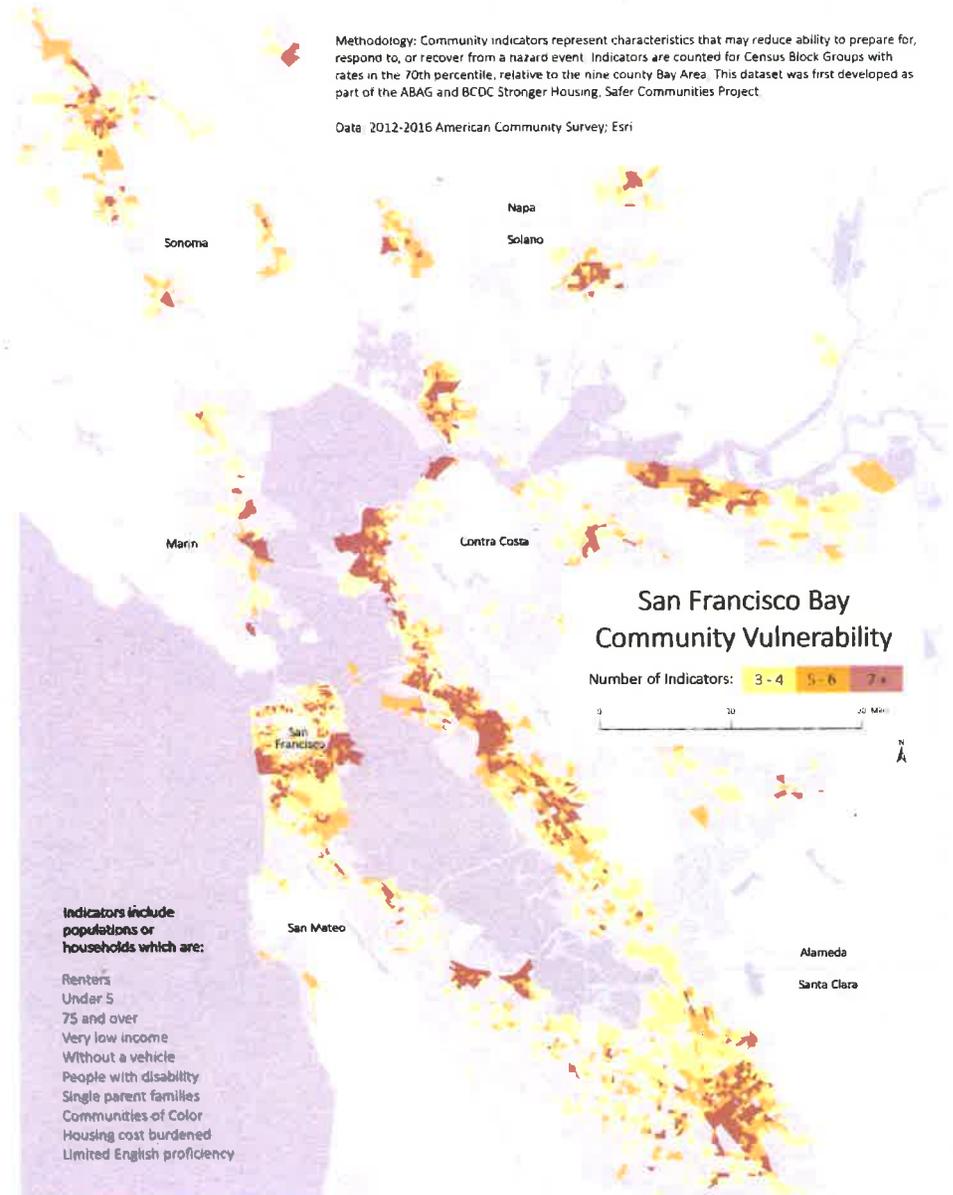


- Coordinating closely with MTC Horizon effort
- Researching subset of PDAs that score highly in MTC's analysis against PDA program goals

Vulnerable Communities

ART Bay Area

- 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



ART Bay Area

Case studies on transportation, PCAs, PDAs, and communities

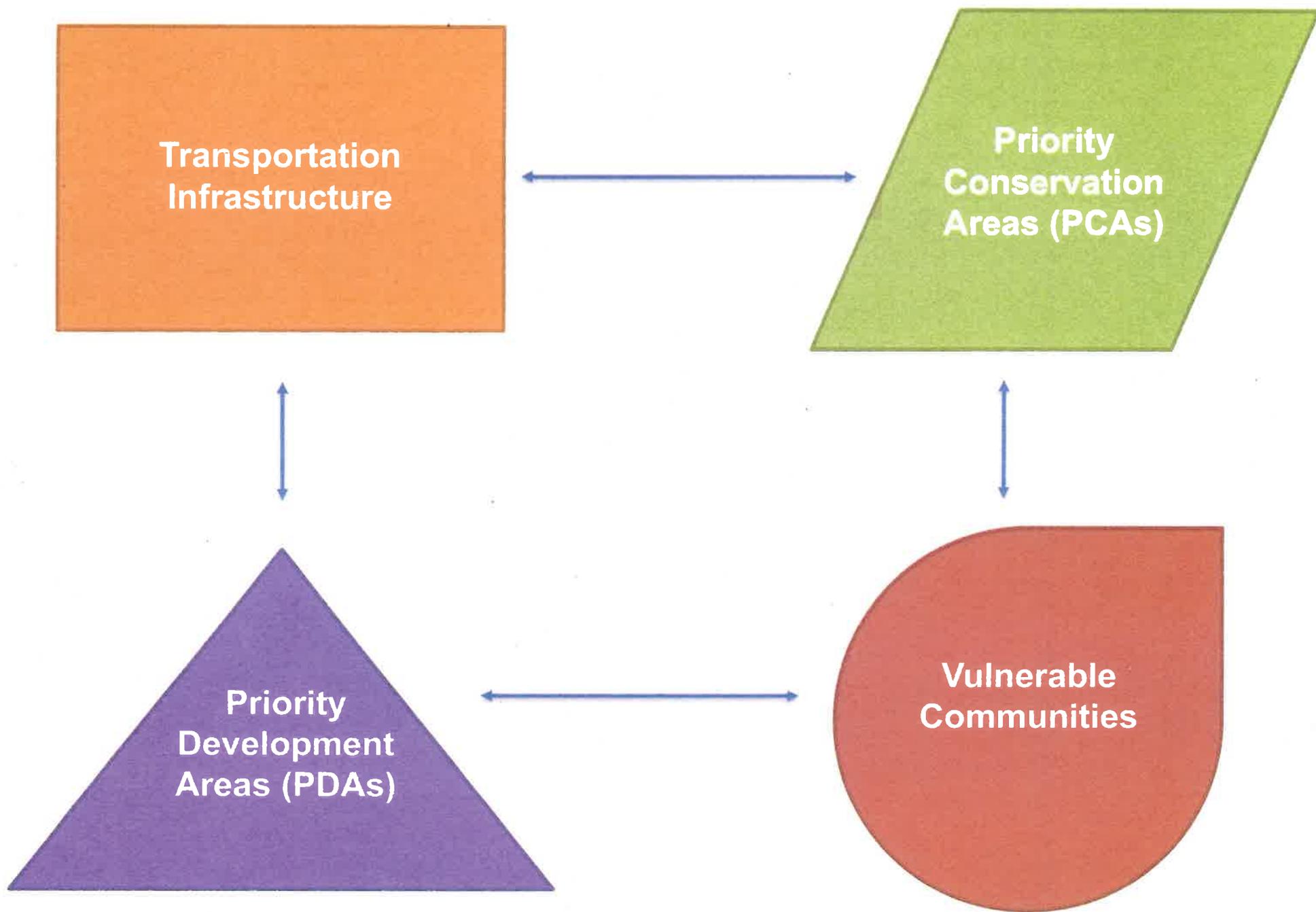
 =
Transportation
Assets

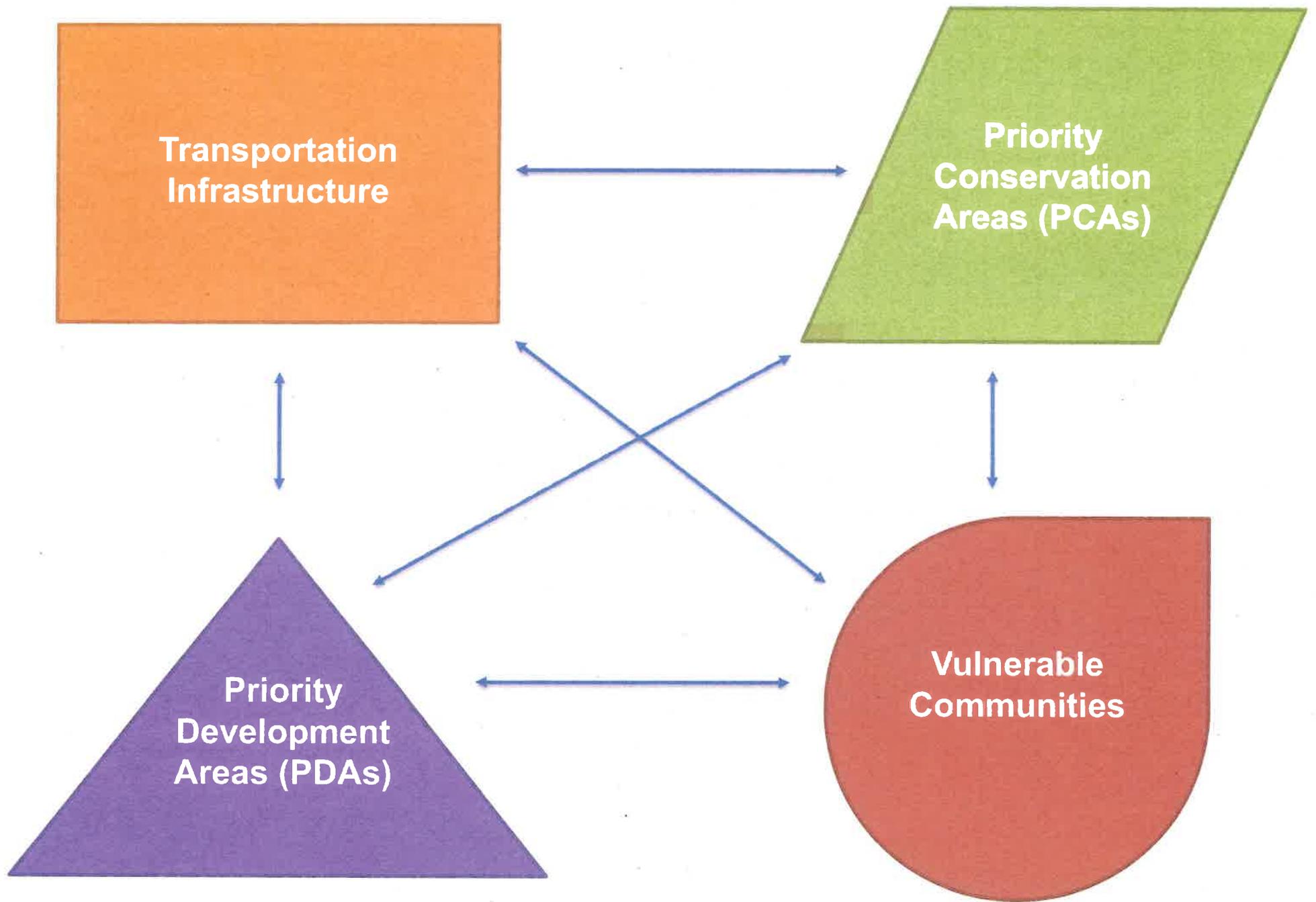
 =
PDA Assets

 =
PCA Assets

 =
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?

ART Bay Area

Case studies on transportation, PCAs, PDAs, and communities

 =
Transportation
Assets

 =
PDA Assets

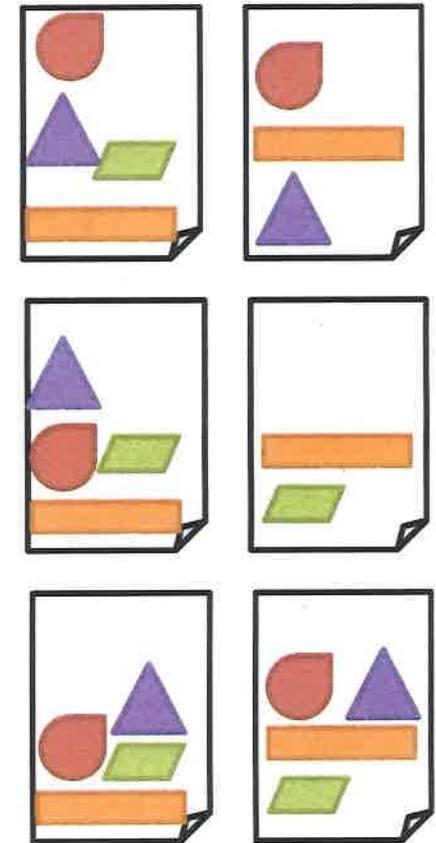
 =
PCA Assets

 =
Vulnerable
Communities
Assets



ART Bay Area

Case studies on the interrelated assets within a geographic unit



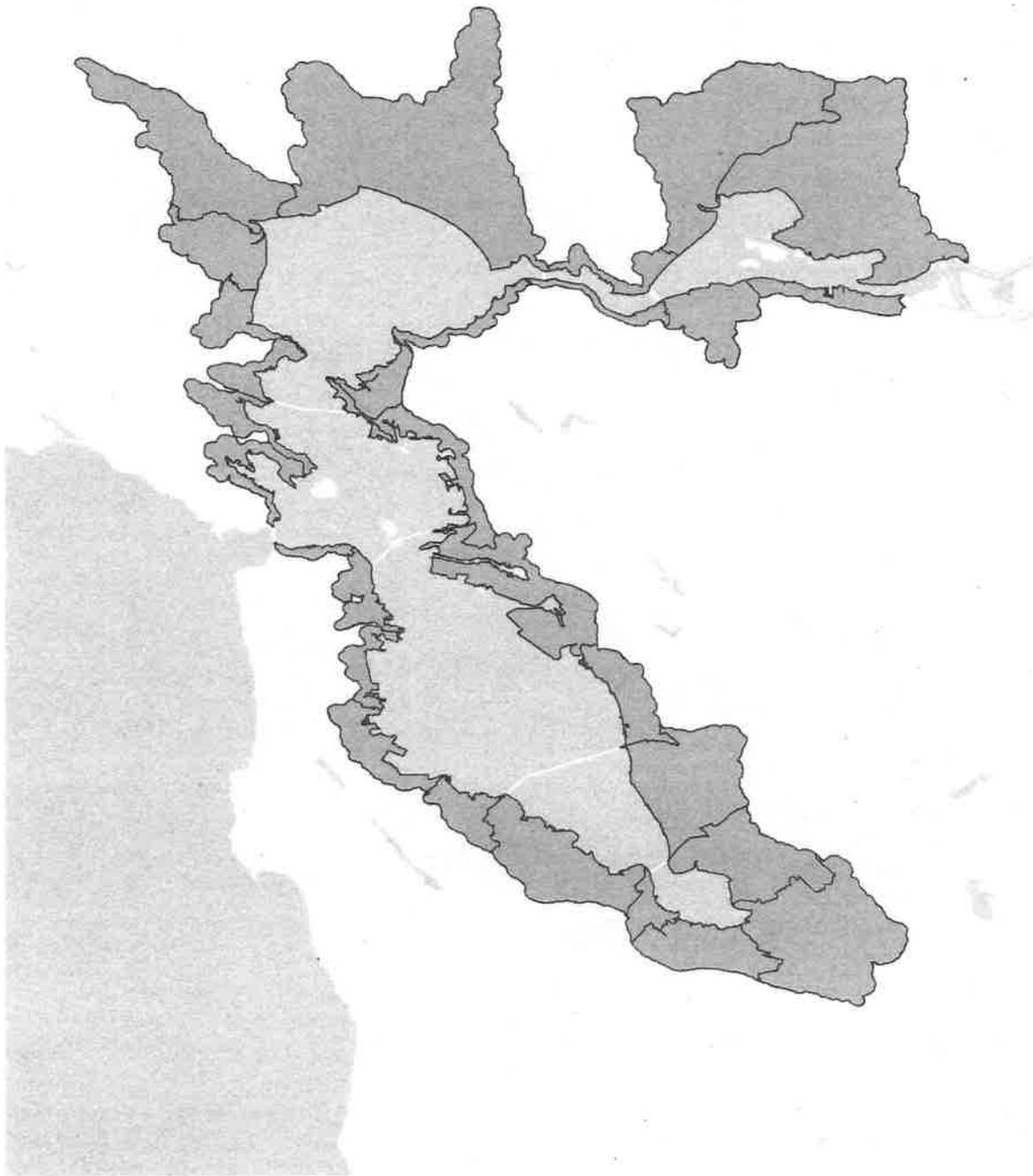
Reorganizing the assessment

ART Bay
Area

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

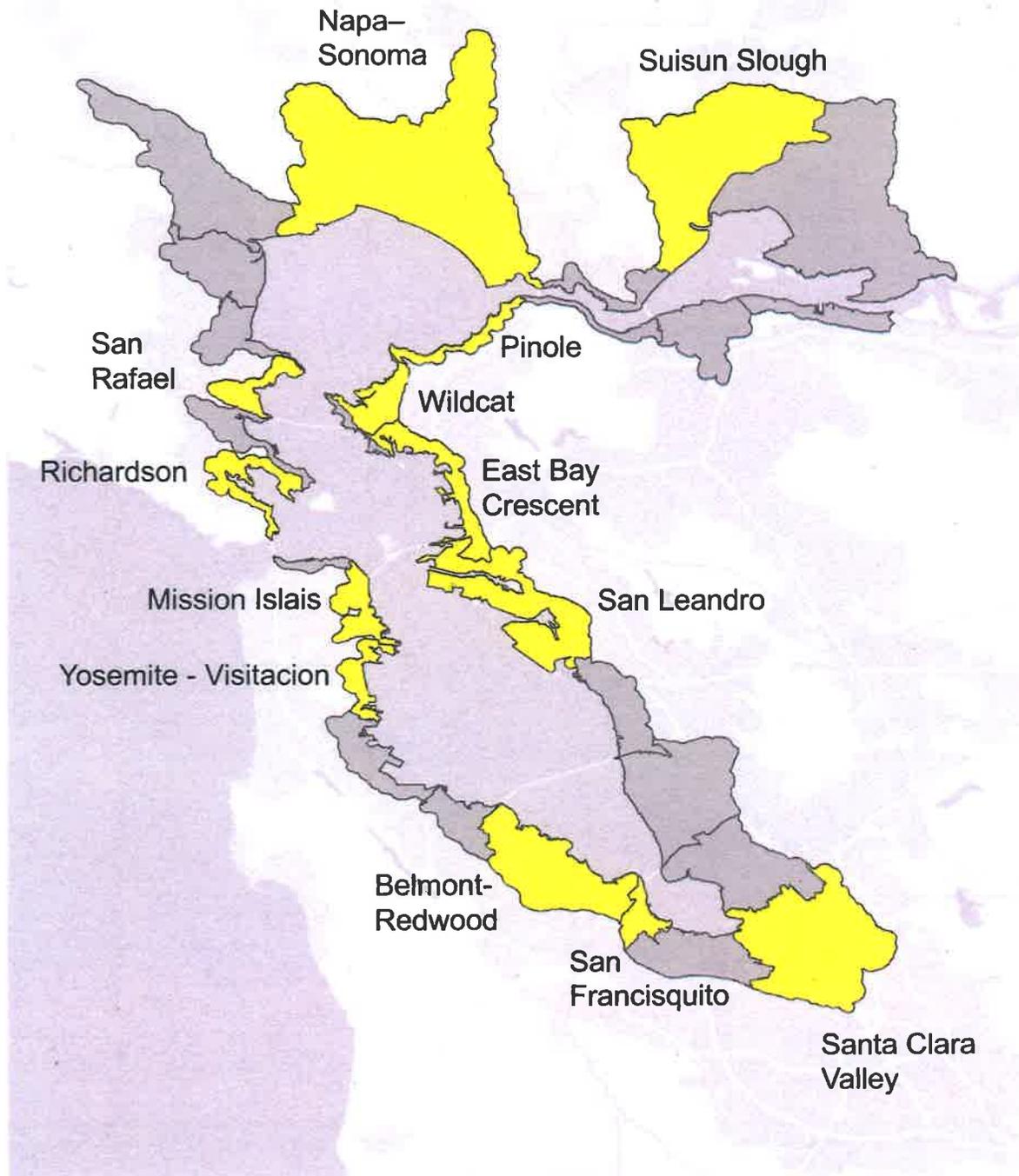
OLUs as an organizing principle

ART Bay
Area

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



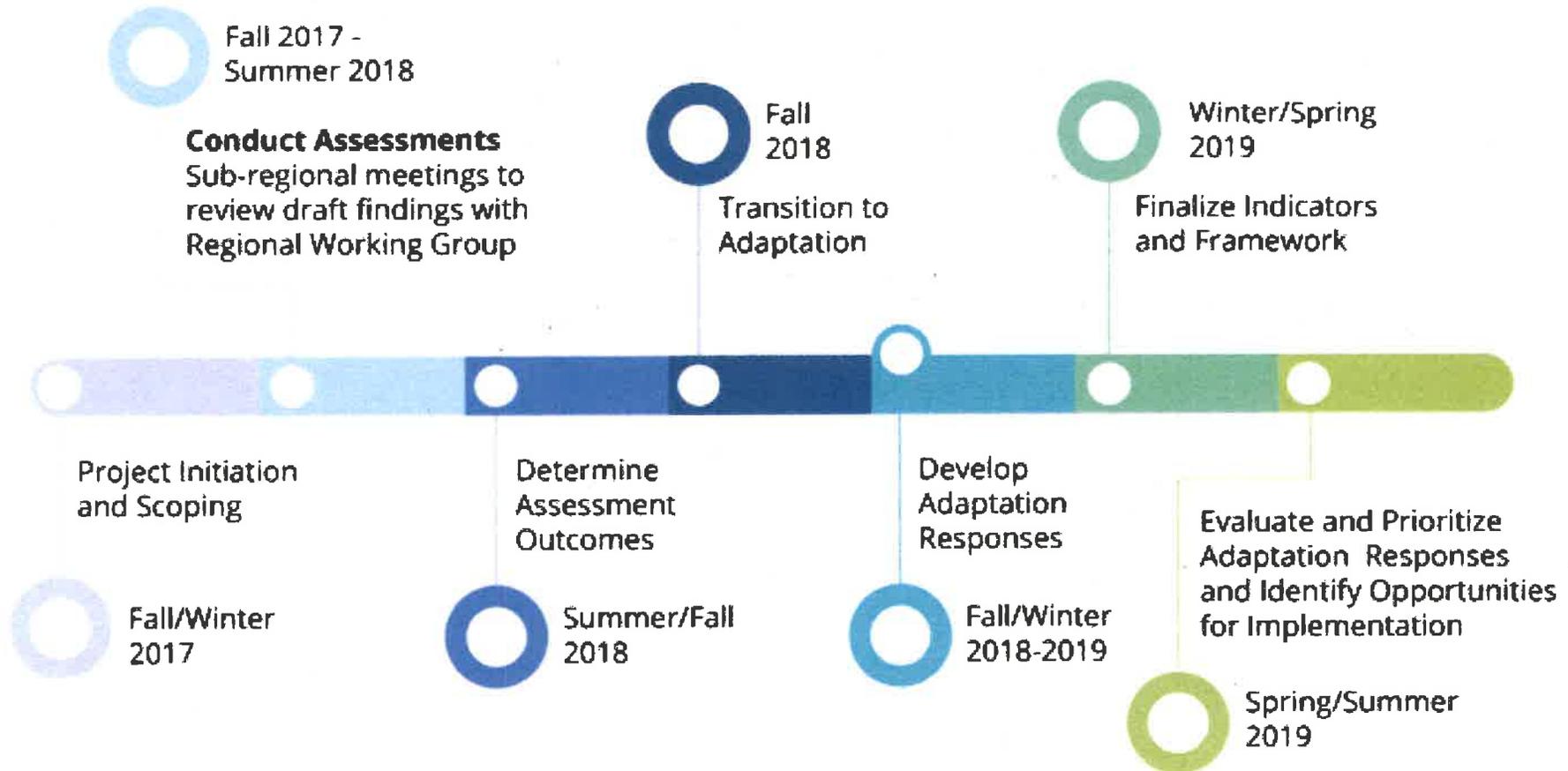


We will start by synthesizing vulnerability assessment results for

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

Next Steps

ART Bay Area



Thank you!

