



MAYOR'S OFFICE OF RESILIENCE

Campus Resilience Challenge

Briefing on Los Angeles Campus Resilience Planning Initiatives

Draft: November 8, 2018

On August 14, 2018, the City of Los Angeles Mayor's Office of Resilience – in collaboration with 100 Resilient Cities and Second Nature – convened a forum on campus resilience at the Los Angeles Emergency Operations Center with representatives from several regional academic institutions, nonprofit organizations, and public sector entities. This report summarizes the forum's findings in the context of a broader effort to build strong and connected communities and provides a roadmap for future collaboration in advancing campus resilience across the region.

INTRODUCTION

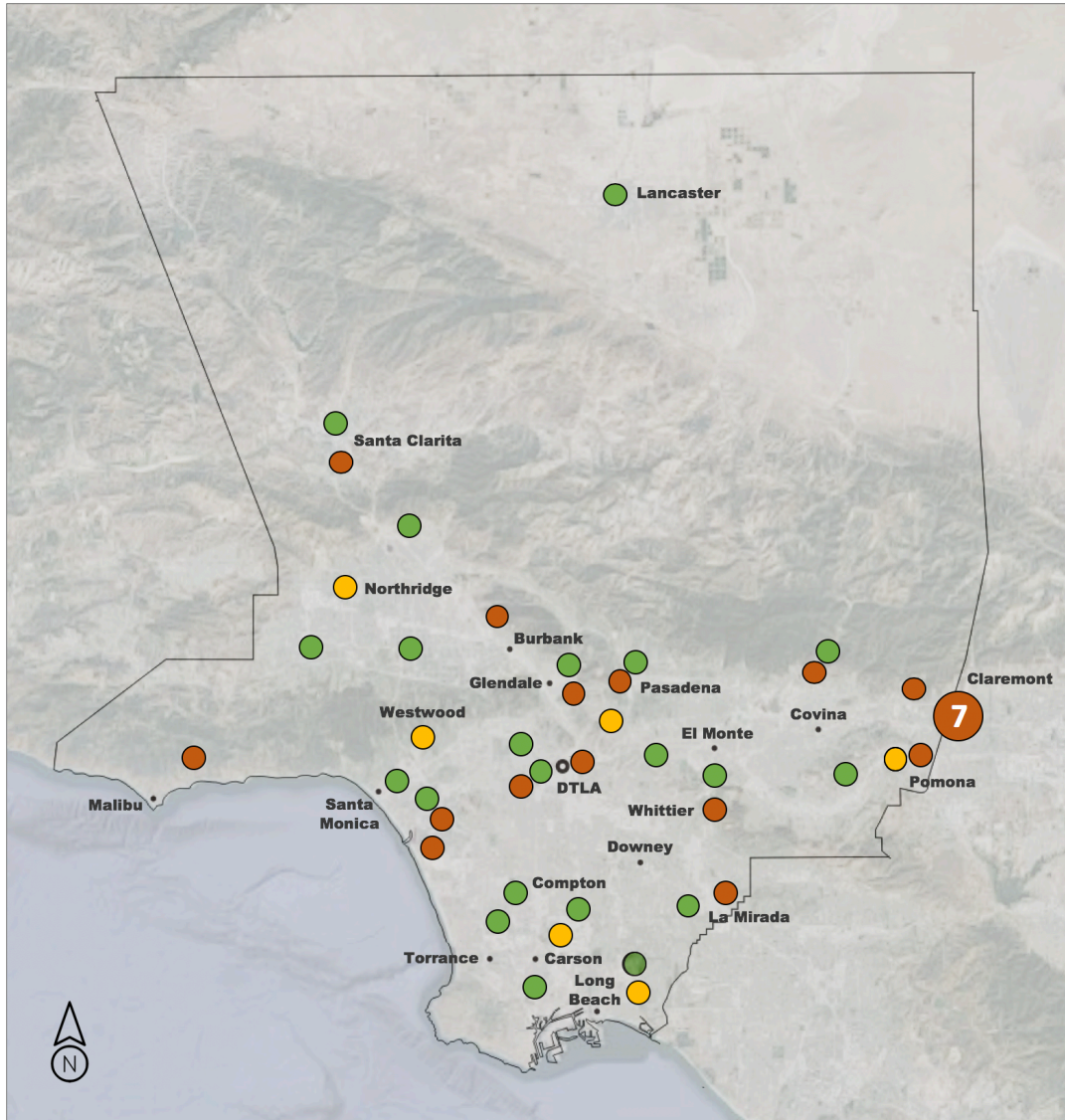
Academic institutions occupy a unique position in the economic, social, and cultural landscape of Los Angeles. In addition to their educational functions, universities and colleges serve as hubs for innovation, centers of employment, and anchors in the communities in which they are located. Their campuses not only cater to students, faculty, and staff but in many instances to the public as well through arts programs, athletics, and alumni networks. Indeed, by virtue of their size – both in terms of land use and population – campuses are very much microcosms of the City itself. And just as the City as a whole is subject to numerous chronic stresses and acute shocks, so are the region's campuses and their environs. Therefore, a resilient campus is a key building block in advancing toward a more resilient Los Angeles.

There are several reasons why the Mayor's Office of Resilience identifies the university and college campus as an integral unit of regional resilience. When mapped across the region, the distribution of campuses depicts a natural – and unparalleled – network on which a regional resilience capacity can be constructed (see Figure 1). As forward-looking institutions, universities and colleges have the potential to serve as stewards of their communities. They can promote a sense of shared responsibility for the well-being of their neighborhoods through internal capacity building and public outreach. They can be havens not only during times of crisis but drivers of capacity building as a matter of course. If designed and implemented effectively, this network of resilient campuses can serve as a model for other institutional typologies in the region (such as hospitals or film studios) and across the country.

As stated in *Resilient Los Angeles* – the City's resilience strategy released on March 2, 2018 – “building resilience means strengthening our community fabric today so that we can survive, adapt, and thrive no matter what kind of crisis or catastrophe is in our future.”¹ Given their character and the multiple roles they play, academic institutions will want to consider what it means to have a “resilient campus” and whether they have the capacity or intent to promote a sense of social cohesion with surrounding communities. These criteria will vary from campus to campus and will be contingent upon a number of factors. For example, a large 4-year university may have ample resources to dedicate toward applied research but few opportunities for meaningful community engagement, whereas a small 2-year community college with more modest funding may excel at public outreach. Institutions located in dense urban areas near the coast may address extreme heat differently than those located in suburban settings further inland. Certain communities may be more dependent on (or have higher expectations of) neighborhood campuses for shelter or service delivery during a crisis than others. This briefing serves as an introduction to considering these and related issues.

¹ *Resilient Los Angeles* can be accessed online at: <https://www.lamayor.org/resilience>

Figure 1: Selected Academic Institutions by Type in Los Angeles County



Note: Institutions are listed in the order in which they appear on the map from west to east. Campus locations are approximate.



4-Year Public Universities

- CSUN *
- UCLA *
- Cal State Dominguez Hills
- Cal State Los Angeles *
- Cal State Long Beach *
- Cal Poly Pomona *



4-Year Private Universities

- Pepperdine University
- California Institute of the Arts *
- Loyola Marymount University
- Antioch University
- Woodbury University
- USC *
- Occidental College *
- SCI-ARCH
- California Institute of Technology
- Whittier College *
- Biola University
- Asuka Pacific University
- University of La Verne *
- Claremont Colleges (7 Campuses)
 - Claremont Graduate University
 - Claremont McKenna College
 - Harvey Mudd College *
 - Keck Graduate Institute *
 - Pitzer College
 - Pomona College *
 - Scripps College



2-Year Community Colleges

- Pierce College
- College of the Canyons
- Santa Monica College *
- Los Angeles Mission College
- Los Angeles Valley College
- West Los Angeles College
- Los Angeles Southwest College
- El Camino College
- Los Angeles City College
- Los Angeles Trade-Tech College
- Los Angeles Harbor College
- Glendale Community College
- Compton College
- Antelope Valley College
- Pasadena City College *
- Long Beach City College
- East Los Angeles College *
- Cerritos College
- Rio Hondo College
- Citrus College
- Mt. San Antonio College

*Indicates that institution was represented at August 14, 2018 workshop

CAMPUS RESILIENCE WORKSHOP

The fact that institutions across the region vary by type and may address resilience differently means there is value in knowledge-sharing and collaboration. The Mayor's Office of Resilience recognized the importance of facilitating such a dialogue (see "Action 23: Launch the Campus Resilience Challenge" in *Resilient Los Angeles*), and the August 14, 2018, workshop served as a step forward in institutionalizing a forum on campus resilience. Thirty-three people attended the workshop, including representatives from 17 of the 44 institutions invited to participate (Figure 2).²

Figure 2: Workshop Participants (left) and Panelists (right)



From left to right: Craig Olwert, Lily House-Peters, and Nurit Katz

As the first of several anticipated meetings, the workshop aimed to achieve three objectives: (1) to introduce the concept of resilience and begin the process of defining "campus resilience"; (2) to survey the status of resilience planning efforts across the region; and (3) to present options for a Campus Resilience Challenge and solicit feedback. The workshop comprised the following sessions:³

1. **Opening Remarks & Workshop Objectives:** Marissa Aho, AICP, Chief Resilience Officer for the City of Los Angeles, provided background on the City's approach to resilience, presented *Resilient Los Angeles*' 15 goals, and explained how campuses can contribute to the overall resilience of the City.⁴
2. **Collaborating for Campus Resilience:** Corinne LeTourneau and Anna Friedman from 100 Resilient Cities discussed their role in assisting cities with the development of their resilience strategies and described how academic institutions may be able to leverage the expertise and resources of 100 Resilient Cities' platform partners. They also facilitated a group exercise to

² See Appendix 1 for a list of workshop participants.

³ Copies of the slides presented during the workshop were distributed to participants (and are available upon request). For this reason, the content of these presentations will not be summarized in this briefing.

⁴ See Appendix 2 for the list of *Resilient Los Angeles* goals.

explore how campus resilience priorities may align with the goals from *Resilient Los Angeles*.⁵

3. **Campus Resilience Panel Discussion:** Representatives from California State University, Long Beach (Lilly House-Peters), University of California, Los Angeles (Nurit Katz), and California State University, Northridge (Craig Olwert) presented on their respective campus' efforts to address resilience and associated challenges. Gina Stovall of Second Nature moderated the discussion.
4. **The Campus Resilience Challenge:** In addition to summarizing workshop takeaways, Sabrina Bornstein, Deputy Chief Resilience Officer for the City of Los Angeles, described the concept of a regional campus resilience challenge, presented six challenge options for consideration, and invited feedback from workshop participants.
5. **Closing Remarks:** In her closing remarks, Marissa Aho, AICP, emphasized the role of the City as a resource for facilitating discussion among campuses, brokering partnerships with outside entities, and identifying funding opportunities in conjunction with a Campus Resilience Advisory Group, which will be established in the coming months.

RESILIENCE IN THE CAMPUS CONTEXT

Understanding what it means to be resilient in the campus context begins with recognizing the range of chronic stresses and acute shocks academic institutions may face. In a survey administered prior to the workshop, participants identified risks that they would like to see addressed in a campus resilience plan (see Figure 3).⁶ There was general consensus on three risks in particular, with nearly 90% of survey respondents reporting earthquakes and extreme heat and over 80% reporting climate change as concerns. Issues of lesser interest loosely fell under the banner of economic security, with half of survey respondents citing food insecurity, less than 40% citing homelessness, and one respondent submitting "jobs" as topics to consider in a campus resilience plan. The degree to which other threats and hazards registered as priority risks varied among survey respondents.

Figure 3: Risks Identified by Workshop Participants (% of Survey Responses Citing Risk)

Most Cited Risks	Majority Cited Risks	Least Cited Risks
<ul style="list-style-type: none"> ▪ Earthquake (89%) ▪ Climate Change (89%) ▪ Extreme Heat (83%) 	<ul style="list-style-type: none"> ▪ Air Quality / Pollution (72%) ▪ Drought (72%) ▪ Fire (72%) ▪ Severe Weather & Flooding (67%) ▪ Urban Heat Island (61%) ▪ Aging Infrastructure (61%) ▪ Inequality (61%) 	<ul style="list-style-type: none"> ▪ Food Insecurity (50%) ▪ Homelessness (39%) ▪ Landslides (6%) ▪ Jobs (6%) *

* Entry submitted by respondent in "Other" field.

⁵ See Appendix 3 for a description of the exercise.

⁶ See Appendix 4 for survey questions and responses.

Although no two academic institutions will address a given risk in exactly the same way, universities and colleges across the region may share overarching campus resilience goals. What is clear at this stage – despite the analogy of the campus as a city unto itself – is that it is difficult to directly adapt the goals outlined in *Resilient Los Angeles* to the campus context. When asked whether any of the 15 goals could be mapped to existing or potential campus programs, there was little consensus among workshop participants around any one goal. Taking a broader view, however, participants gravitated towards goals that addressed preparedness, capacity-building, and internal social cohesion (Goal #1, Goal #4, Goal #8).⁷ Success will ultimately lie with an institution’s ability to cultivate a culture of resilience and capitalize on growing student interest in the topic, not unlike previous efforts to mainstream a culture of sustainability.

What this means in practice will depend on the type of institution and the risk it is trying to address, which may explain why some goals resonated for some participants and not for others. For instance, large research institutions like the University of California, Los Angeles (UCLA), California State University, Northridge (CSUN), and California State University, Long Beach (CSULB) are in a better position to promote and prioritize climate science initiatives in support of the Paris Climate Accords (Goal #12) than most universities and colleges in the region. Most institutions – ranging from commuter colleges to universities in dense urban spaces – will be limited in their ability to provide affordable housing options to students, faculty, or staff (Goal #10) or address health disparities in neighboring communities (Goal #7).

Such limitations speak to larger systemic challenges to developing and implementing campus resilience initiatives. For the overwhelming majority of campuses that do not have a designated resilience officer, resilience-oriented planning (where it exists) can fall under the purview of the institution’s sustainability officer, facilities director, or emergency management specialist.⁸ In all cases, those tasked with resilience planning face a number of constraints including but not limited to: an unclear or undefined scope of what it means to be resilient; inadequate resources (staff, funding, time); lack of awareness, understanding, or political will by campus senior administration; limited opportunities for engagement with the community; and an inability to coordinate with internal stakeholders as well as city, regional, and state entities. As one participant shared:

In designing our resilience assessment and long-term resilience strategy, we face challenges of limited staff capacity and time, especially to engage the community, large staff, and student body. In implementing a resilience strategy, the campus faces financial limitations and barriers, thus making resilience a priority that is recognized by the highest levels of the campus administration, but also a large challenge. Also, translating the often vague resilience indicators into practical, grounded policies and priorities remains a challenge.

Beyond internal challenges, a tension exists between community expectations of the campus during a crisis and the capacity (or desire) of the campus to deliver on those expectations. In most emergency

⁷ Goal #1: Educate and engage Angelenos around risk reduction and preparedness so they can be self-sufficient for at least 7 to 14 days after a major shock; Goal #4: Build social cohesion and increase preparedness through community collaboration; Goal #8: Integrate resilience principles into government to prioritize our most vulnerable people, places, and systems.

⁸ While not a problem in and of itself, resilience planning is most effective when done collectively (as opposed to being siloed in one office) and spearheaded by an officer who has visibility across relevant departments. For example, facilities managers may be more inclined to think about the adverse impact of a crisis on campus infrastructure such as waste disposal (where others may not take such considerations into account) but be less apt to plan for risks associated with economic security or climate change over a longer time horizon.

scenarios, administrators are apt to ask students, faculty, and non-essential staff to vacate the campus rather than encourage them to shelter in place. Neighboring residents, however, may view local campuses as a safe haven during a disaster and assume a degree of service or access to facilities. As resilience planning moves forward, campuses will have to ascertain the degree to which they can serve as resilience hubs and how they can engage the surrounding community in that discussion. Here, the City of Los Angeles and other government entities can assist campuses in pursuing opportunities for further coordination and with forming partnerships with relevant nonprofit organizations.

CASE STUDIES

Although campus resilience planning as a discipline is still in its earliest stages, some local academic institutions are making great strides in developing and implementing resilience programs. This section provides a summary of the work conducted at CSULB, UCLA, and CSUN (all three of which are signatories to The President's Climate Commitment)⁹ with an emphasis on their institutional strengths, opportunities to leverage these strengths, and the challenges they have faced in doing so. The purpose here is not to suggest that all regional campuses should adopt similar measures but to share lessons learned and encourage a more collaborative process for exploring different approaches to campus resilience planning across the region.

California State University, Long Beach

The resilience component of the Climate Commitment prompted CSULB to shift the focus of its previous climate action plan from mitigation to resilience and adaptation and appoint a dedicated resilience commitment coordinator. Indeed, CSULB faces several climate-related challenges. The campus' proximity to the coastline, major freeways, and Port of Long Beach increases its exposure to air pollution, flooding, and sea-level rise in addition to the risks such as extreme heat and drought that afflict Southern California in general. The effects of some of these risks are amplified by the fact that CSULB is a large, commuter campus that hosts 40,000 students, and its carbon footprint continues to expand due to daily vehicle traffic and aging buildings that are not energy efficient. While senior university officials may recognize these issues, they often prioritize more tangible public safety threats (such as an active shooter situation) over long-term climate risk.

That said, the university has taken several steps to address these shocks and ongoing stresses. Its involvement with the City of Long Beach's Climate Action and Adaptation Process has afforded CSULB the opportunity to align campus resilience goals with those of the city and partner with the city on public outreach efforts. A workshop this past March that brought together campus, city, and community stakeholders yielded specific target areas – namely energy/green infrastructure, active transportation, community advocacy, and social justice – on which to focus in the near- to medium-term. By promoting ongoing dialogue, engaging a motivated student body in research projects, and continuing to emphasize the importance of sustainable operations, the university hopes to build on the success of

⁹ The President's Climate Commitment requires signatories to develop a Climate Action Plan to increase campus resilience over a three-year period. By the end of the first year of the commitment, signatories must form a campus-community task force that will – by the end of the second year – produce a campus-community resilience assessment. Signatories must then submit their Climate Action Plan by the end of the third year and submit annual progress evaluations thereafter.

one-off projects such as a newly constructed net-zero energy building (the largest in the California State University system) and its 4.5-megawatt solar installation.

University of California, Los Angeles

As a large university, UCLA encounters many of the same issues as CSULB. The campus is located in one of the densest and most congested neighborhoods in the region and serves nearly 45,000 students. Although the university has a long history in research on sustainability and climate science issues, it faces many operational challenges. Much of the campus' infrastructure is aging, and deferred maintenance costs total over one billion dollars. The extreme density of the campus (and environs) makes it difficult to pursue large-scale infrastructure innovation or even perform routine upgrades. This can lead to events like the 2014 flood when a 93-year old water main ruptured on Sunset Boulevard, inundating much of the campus with eight to ten million gallons of water. This incident revealed another vulnerability in the university's resilience posture. At a time when most institutions were seeking ways to minimize the adverse effects of a drought, very few were prepared to react to unforeseen risks such as flooding.

Campus planners are working to correct the university's approach to resilience planning. Building on Office of Emergency Management's campus vulnerability assessment – that includes climate risks – UCLA's sustainability team is actively incorporating resilience into its planning scope. It has worked with undergraduate students to design a new campus stormwater system as well as with graduate students to adapt the 100 Resilient Cities City Resilience Index to the campus context and begin mapping campus programs against the actions presented in *Resilient Los Angeles*. The sustainability team is also actively seeking to break down silos across campus by regularly interfacing with colleagues responsible for business continuity, emergency management, and public health. While UCLA is in the process of establishing more direct channels for community engagement, it currently provides a broader public service by leveraging its research expertise and making climate science more accessible through projected forecasts. However, it can be difficult for campus planners to operationalize such research given the sheer amount of available data and a lack of consensus around appropriate metrics.

California State University, Northridge

In terms of public outreach, CSUN has made a concerted effort to consult a wide range of community stakeholders. In addition to developing the Climate Action Plan to meet the requirements of the Climate Commitment, the university is actively updating its 2013 Sustainability Plan and is pursuing a 2040 target for carbon neutrality campus-wide. Its Sustainability Center embodies this ambitious goal as a LEED Platinum and net-zero energy facility; similarly, all new buildings on campus will meet at least LEED Gold certification standards. The extent to which older infrastructure can be upgraded – to handle increased cooling loads, for example – is still a challenge. The university has had mixed success in working with local utility providers to reduce excess energy costs and will likely continue to engage in prolonged negotiations as new large-scale solar projects come online.

Compared to CSULB and UCLA, CSUN has made a more concerted effort in engaging neighboring communities. Over the course of a one-year project, master's degree candidates worked on a monthly basis with representatives from local nonprofits, neighborhood councils, and Council District 12 to

identify major issues and concerns (not just risks) among Northridge stakeholders, discuss what approaches have worked (and not worked) in the past, and formalize channels for more effective communication going forward. This in-depth and ongoing interaction allowed the students to course-correct when events did not unfold as planned. In response to low-community turnout at The Nature Conservancy training event, students conducted an online survey and solicited over 60 responses. When a community mapping exercise did not yield any usable outputs, students adapted their approach to explore issues more pertinent to participants. By the end of the project, students presented their findings and issued 28 recommendations in the form of *Resilient Northridge* (modeled after *Resilient Los Angeles*), CSUN's strategy for campus-community resilience.

THE CAMPUS RESILIENCE CHALLENGE

In addition to participating in a regional forum on campus resilience, several academic institutions voiced interest in partnering with the City on resilience planning efforts and program implementation, particularly related to community- and project-related initiatives.¹⁰ *Resilient Los Angeles* highlights the importance of this relationship in Action 23, which directs the City to “promote and encourage innovative actions that advance physical resilience and social cohesion by engaging local institutions” through a Campus Resilience Challenge. Inspired by the network model pioneered by 100 Resilient Cities, the purpose of such a challenge is to foster a regional commitment to resilience among universities and colleges and to marshal the resources necessary to continue advancing campus resilience goals (both on individual and collective scales).

Since academic institutions across the region are at different stages of the resilience planning process, the Campus Resilience Challenge needs to be flexible enough to cater to as many parties as possible and offer multiple levels of engagement. The Mayor's Office of Resilience will ask local universities and colleges to sign a pledge expressing a commitment to building campus resilience. This pledge – which complements rather than competes with the President's Climate Commitment – will certify participants as formal partners with the City and institutionalize the network of regional campuses.

For institutions seeking further engagement, the City will facilitate the establishment of a Campus Resilience Advisory Group that reflects the composition of regional universities and colleges (i.e. public vs. private, large vs. small, residential vs. commuter, urban vs. suburban, etc.) and includes strategic resilience partners. The advisory group's primary objective will be to build on the 100 Resilient Cities model and seek to identify partners that can provide various levels of technical assistance, pro bono support, or funding. As opportunities arise, the advisory group will inform the network of universities and colleges to gauge interest and serve as a liaison between platform partners and academic institutions. Similarly, academic institutions – via the campus resilience forum or on an individual basis – can notify the advisory group about specific needs and/or areas of interest and ask for outside support. The guiding principle behind this initiative will be to provide campuses with high-impact support without burdening them with additional responsibilities. As the Campus Resilience Challenge is still in development, ongoing feedback is welcome.

¹⁰ The Mayor's Office of Resilience presented six examples of what a Campus Resilience Challenge could look like during the workshop (see Appendix 5). Participant feedback – via a post-workshop survey – demonstrated overwhelming interest in challenges that focused on campus-community interaction and City support of campus pilot projects.

In the coming months, the Mayor's Office of Resilience will continue to advance the campus resilience forum through regular convenings. Concurrently, the City will work with interested parties in establishing the Campus Resilience Advisory Group and begin identifying one to two initial partners that can offer campuses with technical assistance and support with their resilience building efforts. In the meantime, academic institutions are encouraged to engage the City on any matters related to campus or community resilience. As stated in *Resilient Los Angeles*, this ongoing dialogue is an important step forward in the "citywide commitment to continue to collaborate, form new partnerships, and design new initiatives in a continuous process that will contribute to a safer and stronger Los Angeles."

APPENDIX 1: WORKSHOP PARTICIPANTS

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APPENDIX 2A: SUMMARY OF RESILIENT LOS ANGELES GOALS BY CHAPTER (HANDOUT)

Appendix A: Summary of Actions by Chapter

Shocks and Stresses Key

Earthquake	Homelessness	Air Quality/Pollution
Fire	Lack of Affordable Housing	Urban Heat Island
Landslides	Crime and Violence	Extreme Heat
Cybercrime and Terrorism	Disparities in Employment	Drought
Riot/Civil Unrest	Disparities in Health	Severe Weather and Flooding
Public Health Emergencies	Disparities in Access to Open Space	Sea Level Rise
Chemical Emergencies	Disparities in Access to Transit	Extreme Cold
Tsunami	Food Insecurity	Aging Infrastructure
Inequity	Climate Change	Infrastructure or Building Failure
Education		

Timeframe Key

Short Term	Medium Term	Long Term
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Appendix A: Summary of Actions by Chapter

CHAPTER 1: SAFE AND THRIVING ANGELENOS













































GOAL 1: EDUCATE AND ENGAGE ANGELENOS AROUND RISK REDUCTION AND PREPAREDNESS SO THEY CAN BE SELF-SUFFICIENT FOR AT LEAST SEVEN TO 14 DAYS AFTER A MAJOR SHOCK

ACTION	TIMEFRAME	SHOCKS/STRESSES
1 LAUNCH A COORDINATED PREPAREDNESS CAMPAIGN THAT ENCOURAGES ANGELENOS TO TAKE ACTIONS THAT IMPROVE THEIR RESILIENCE		
2 EXPAND WORKFORCE PREPAREDNESS TRAINING OPPORTUNITIES AND PROGRAMS TO QUICKLY RESTORE ESSENTIAL CITY SERVICES AFTER A MAJOR SHOCK		
3 INCREASE THE NUMBER OF ANGELENOS WITH PREPAREDNESS RESOURCES AND TRAINING IN OUR MOST VULNERABLE COMMUNITIES		
4 TEACH ANGELENOS HOW TO PROTECT THEMSELVES FROM CYBERATTACKS		
5 GROW PARTNERSHIPS BETWEEN THE PUBLIC, PRIVATE, AND NONPROFIT SECTORS TO PROVIDE CRITICAL SERVICES TO VULNERABLE ANGELENOS IN TIMES OF CRISIS		
6 INCREASE ACCESS TO EMERGENCY PREPAREDNESS AND MITIGATION RESOURCES FOR BUSINESSES		
7 PROVIDE ANGELENOS ACCESS TO ADDITIONAL TRAUMA RESOURCES		
8 GROW PARTNERSHIPS THAT EXPAND SUPPORT FOR ANIMALS AFTER A MAJOR SHOCK		

APPENDIX 2B: SUMMARY OF RESILIENT LOS ANGELES GOALS BY CHAPTER (HANDOUT)

































Appendix A: Summary of Actions by Chapter















 GOAL 2: DEVELOP ADDITIONAL PATHWAYS TO EMPLOYMENT AND THE DELIVERY OF FINANCIAL LITERACY TOOLS TO SUPPORT OUR MOST VULNERABLE ANGELENOS		
ACTION	TIMEFRAME	SHOCKS/STRESSES
9 EXPAND ACCESS TO FINANCIAL LITERACY AND SECURITY RESOURCES FOR ALL ANGELENOS	1	     
10 ESTABLISH A CAPITAL PROJECT PIPELINE THAT CREATES LIVING WAGE JOBS FOR LOS ANGELES' MOST DISADVANTAGED	1	  
11 COLLABORATE WITH ANCHOR INSTITUTIONS TO TARGET INVESTMENT	1	  
12 INCREASE ACCESS TO FREE WI-FI TO HELP REDUCE TECHNOLOGY DISPARITIES	1	 
13 IDENTIFY, CULTIVATE, AND INCUBATE HIGH-GROWTH SECTORS WHILE PROMOTING ECONOMIC MOBILITY	1	  
14 EXPAND PARTNERSHIPS THAT ENCOURAGE REINTEGRATION AND SUCCESSFUL REENTRY OF PREVIOUSLY INCARCERATED INDIVIDUALS	1	 

 GOAL 3: CULTIVATE LEADERSHIP, STEWARDSHIP, AND EQUITY WITH YOUNG ANGELENOS		
ACTION	TIMEFRAME	SHOCKS/STRESSES
15 BUILD PARTNERSHIPS THAT STRENGTHEN THE EDUCATION-TO-CAREER PIPELINE	1	  
16 STRENGTHEN OPPORTUNITIES FOR YOUNG ANGELENOS TO CONNECT WITH CIVIC LEADERSHIP PROGRAMS	1	   
17 INCREASE ECONOMIC OPPORTUNITIES BY GENERATING AWARENESS AND USE OF CITY PROGRAMS AND SERVICES THAT REDUCE VIOLENCE	1	   
18 DEPLOY EMPLOYMENT DEVELOPMENT PROGRAMS AND PARTNERSHIPS TO PREVENT AND REDUCE YOUTH HOMELESSNESS	1	 
19 WORK WITH YOUNG ANGELENOS TO REDUCE CRIME AND VIOLENCE, ESPECIALLY WHERE TEENS AND YOUTH ARE VICTIMS	1	 
20 DEVELOP THE NEXT GENERATION OF STEWARDS OF LOS ANGELES TO BE LEADERS IN CLIMATE AND DISASTER RESILIENCE	1	     

Appendix A: Summary of Actions by Chapter



























CHAPTER 2: STRONGER AND CONNECTED NEIGHBORHOODS


































 GOAL 4: BUILD SOCIAL COHESION AND INCREASE PREPAREDNESS THROUGH COMMUNITY COLLABORATION		
ACTION	TIMEFRAME	SHOCKS/STRESSES
21 INTEGRATE RESILIENCE INTO COMMUNITY PLAN UPDATES INCLUDING RISK AND VULNERABILITY ANALYSIS AND POLICIES AND IMPLEMENTATION MEASURES THAT ADDRESS THEM	1	    
22 CONNECT COMMUNITY ORGANIZATIONS WITH EXPERTS AND RESOURCES TO GUIDE AND EFFICIENTLY SUPPORT THE DEVELOPMENT OF NEIGHBORHOOD RESILIENCE HUBS	1	     
23 LAUNCH THE CAMPUS RESILIENCE CHALLENGE	1	    
24 PROMOTE NEIGHBORHOOD PLANNING PROGRAMS TO SUPPORT ALL LOS ANGELES NEIGHBORHOODS IN DEVELOPING PREPAREDNESS PLANS	1	     
25 INCREASE NEIGHBORHOOD OUTREACH AND EDUCATION AROUND WILDFIRE AND MUDSLIDE RISK REDUCTION IN OUR MOST VULNERABLE NEIGHBORHOODS	1	     
26 LAUNCH THE "NEIGHBORLY" MICROGRANTS PROGRAM TO BUILD SOCIAL CONNECTIONS BETWEEN NEIGHBORS	1	     

 GOAL 5: INCREASE PROGRAMS AND PARTNERSHIPS THAT FOSTER WELCOMING NEIGHBORHOODS		
ACTION	TIMEFRAME	SHOCKS/STRESSES
27 PROMOTE DIVERSITY IN COMMUNITY LEADERSHIP BY PURSUING POLICIES AND PROGRAMS THAT DEVELOP MORE LEADERS REFLECTING THE COMMUNITIES THEY REPRESENT	1	  
28 EXPAND ACCESS TO CITY SERVICES FOR HOMELESS, MARGINALIZED, AND VULNERABLE COMMUNITIES	1	  
29 CONTINUE TO SUPPORT AND EXPAND THE LOS ANGELES JUSTICE FUND	1	 
30 INCREASE PARTICIPATION FROM AND PLAN WITH NEW ANGELENOS TO ENCOURAGE WELCOMING NEIGHBORHOODS	1	 
31 EXPAND AN INCLUSIVE NETWORK OF SERVICES THAT STRENGTHEN INDIVIDUALS, FAMILIES, AND COMMUNITIES TO COMBAT ALL FORMS OF VIOLENT EXTREMISM	1	  

APPENDIX 2C: SUMMARY OF RESILIENT LOS ANGELES GOALS BY CHAPTER (HANDOUT)





















































Appendix A: Summary of Actions by Chapter

 GOAL 6: PREPARE AND PROTECT THOSE MOST VULNERABLE TO INCREASING EXTREME HEAT		
ACTION	TIMEFRAME	SHOCKS/STRESSES
32 DEVELOP AN URBAN HEAT VULNERABILITY INDEX AND MITIGATION PLAN TO PREPARE FOR HIGHER TEMPERATURES AND MORE FREQUENT EXTREME HEAT		     
33 DEVELOP AND LAUNCH A NEIGHBORHOOD RETROFIT PILOT PROGRAM TO TEST COOLING STRATEGIES THAT PREPARE FOR HIGHER TEMPERATURES		   
34 PLANT TREES IN COMMUNITIES WITH FEWER TREES TO GROW A MORE EQUITABLE TREE CANOPY BY 2028		    
35 EXPAND THE CITY'S NEIGHBORHOOD COOLING CENTER PROGRAM		     

 GOAL 7: REDUCE HEALTH AND WELLNESS DISPARITIES ACROSS NEIGHBORHOODS		
ACTION	TIMEFRAME	SHOCKS/STRESSES
36 INCREASE THE HEALTH AND WELLNESS OF ANGELENOS THROUGH 2028 OLYMPIC AND PARALYMPIC PARTNERSHIPS		  
37 EXPAND PARTNERSHIPS AND PROGRAMS TO REDUCE NEIGHBORHOOD FOOD DISPARITIES		  
38 EXPAND MOBILE CITY SERVICES FOR VULNERABLE POPULATIONS		  
39 INVEST IN HEALTHY AND SAFE HOUSING TO IMPROVE PUBLIC HEALTH AND INCREASE EQUITY		   
40 INCREASE ACCESS TO OPEN SPACE IN UNDERSERVED NEIGHBORHOODS		  
41 INCREASE STABILITY THROUGH INVESTMENTS IN AFFORDABLE HOUSING, JOBS, AND OPEN SPACE IN COMMUNITIES ADJACENT TO THE LOS ANGELES RIVER		    
42 IMPROVE THE HEALTH AND WELL-BEING FOR ALL AGES THROUGH IMPROVEMENTS IN MOBILITY		   

Appendix A: Summary of Actions by Chapter

CHAPTER 3: PREPARED AND RESPONSIVE CITY

 GOAL 8: INTEGRATE RESILIENCE PRINCIPLES INTO GOVERNMENT TO PRIORITIZE OUR MOST VULNERABLE PEOPLE, PLACES, AND SYSTEMS		
ACTION	TIMEFRAME	SHOCKS/STRESSES
43 MAKE RESILIENCE-BUILDING A PERMANENT PART OF THE CITY OF LOS ANGELES' SYSTEMS AND SERVICES		     
44 REQUIRE RESILIENCE AS A GUIDING PRINCIPLE FOR LAND USE DECISIONS IN THE LOS ANGELES GENERAL PLAN AND ZONING CODE UPDATES		     
45 INTEGRATE RESILIENCE AND SUSTAINABILITY PRINCIPLES INTO CITY CAPITAL PLANNING		    
46 INTEGRATE ADDITIONAL RESILIENCE MEASURES IN THE IMPLEMENTATION OF LOS ANGELES RIVER WATERWAY REVITALIZATION EFFORTS		     
47 ADOPT EMERGENCY LAND-USE TOOLS TO ADDRESS DISPLACEMENT AND REDEVELOPMENT IN ADVANCE OF A MAJOR EARTHQUAKE OR OTHER CATASTROPHIC EVENT		   
48 DEVELOP NEW CITYWIDE EQUITY INDICATORS TO INFORM AND MEASURE INCLUSIVE INVESTMENTS AND POLICY-MAKING		     
49 SUPPORT SYSTEMS AND SERVICES THAT ARE LINGUISTICALLY INCLUSIVE AND CULTURALLY COMPETENT		     
50 INNOVATE MORE RESILIENT AND SUSTAINABLE BUILDINGS BY ADVANCING BUILDING FORWARD L.A.		   

APPENDIX 2D: SUMMARY OF RESILIENT LOS ANGELES GOALS BY CHAPTER (HANDOUT)

Appendix A: Summary of Actions by Chapter

GOAL 9: EQUIP GOVERNMENT WITH TECHNOLOGY AND DATA TO INCREASE SITUATIONAL AWARENESS AND EXPEDITE POST-DISASTER RECOVERY

ACTION	TIMEFRAME	SHOCKS/STRESSES
51 FACILITATE PARTNERSHIPS WITH LOS ANGELES BUSINESSES THROUGH THE L.A. CYBERLAB, OUR CYBERSECURITY PLATFORM	☐	🏢 📱 🌐
52 PREVENT CRIME AND VIOLENCE THROUGH ENHANCED USE OF DATA	☐	🔒 📊
53 IMPLEMENT CITYWIDE DATA INTEGRATION SYSTEMS TO SUPPORT FIRST RESPONDERS AND CITY DEPARTMENTS IN IDENTIFYING THE MOST URGENT AND HIGHEST NEED SITUATIONS	☐	🔥 🚒 🚑 🚒
54 ESTABLISH POST-DISASTER RESTORATION TARGETS FOR CRITICAL INFRASTRUCTURE	☐	🏠 🌳 📱 🚗 🚚 🚚

GOAL 10: PROVIDE SAFE AND AFFORDABLE HOUSING FOR ALL ANGELENOS

ACTION	TIMEFRAME	SHOCKS/STRESSES
55 DOUBLE THE PACE OF AFFORDABLE HOUSING PRODUCTION AND PRESERVATION AND TRIPLE PRODUCTION OF NEW PERMANENT SUPPORTIVE HOUSING BY CHANGING REGULATION, ADOPTING NEW FINANCING MECHANISMS, AND EXPLORING ADAPTIVE RE-USE OF PUBLICLY-OWNED SITES	☐	🏠 🏠 🏠 🏠
56 PROMOTE AND EXPAND HOUSING OPTIONS FOR VULNERABLE POPULATIONS SUCH AS CHRONICALLY HOMELESS AND HOMELESS VETERANS AND VICTIMS OF DOMESTIC VIOLENCE AND HUMAN TRAFFICKING	☐	🏠 🏠 🏠
57 INCREASE PARTICIPATION IN CITY AND STATE PROGRAMS THAT PROMOTE SAFER HOUSING BY REDUCING EARTHQUAKE RISK	☐	🏠 🏠 🏠 🏠 🏠
58 COORDINATE A HOMELESS HOUSING SERVICE PROVIDER PREPAREDNESS PROGRAM TO FORTIFY SYSTEMS AND SERVICES TO WITHSTAND FUTURE CHALLENGES	☐	🏠 🏠 🌳 🚑 🌐 🏠
59 CONNECT PEOPLE EXPERIENCING HOMELESSNESS NEAR THE RIVER WITH BETTER ACCESS TO SERVICES AND HOUSING	☐	🏠 🏠 🚗 🚑 🌐
60 ESTABLISH NEIGHBORHOOD-BASED, SHORT- AND LONG-TERM POST-DISASTER HOUSING PLANS	☐	🏠 🏠 🌳 🏠 🏠 🏠

Appendix A: Summary of Actions by Chapter

GOAL 11: RESTORE, REBUILD, AND MODERNIZE LOS ANGELES' INFRASTRUCTURE

ACTION	TIMEFRAME	SHOCKS/STRESSES
61 ADVANCE SEISMIC SAFETY, PRIORITIZING THE MOST VULNERABLE BUILDINGS, INFRASTRUCTURE, AND SYSTEMS	☐	🏠 🔥 🌳 📱 🚗 🚚
62 EXPAND AND PROTECT WATER SOURCES TO REDUCE DEPENDENCE ON IMPORTED WATER AND STRENGTHEN THE CITY'S LOCAL WATER SUPPLY	☐	🏠 🌳 🌳 📱 🚗 🚚
63 PRIORITIZE KEY NEIGHBORHOODS FOR STORMWATER CAPTURE, URBAN GREENING, AND OTHER COMMUNITY BENEFITS	☐	🌳 🌳 🌳 📱 🚗 🚚
64 LEVERAGE FLOOD MITIGATION INFRASTRUCTURE TO ENHANCE LOCAL WATER AVAILABILITY	☐	🏠 🔥 🌳 📱 🚗 🚚
65 PROACTIVELY ADDRESS FLOOD RISK THROUGH POLICY, COMMUNICATION, AND INFRASTRUCTURE PLANNING	☐	🌳 🌳 📱 🚗 🚚 🏠
66 DEVELOP A CLEAN ENERGY AND SMART GRID INFRASTRUCTURE THAT IS RELIABLE IN THE FACE OF FUTURE CLIMATE IMPACTS AND HAZARDS	☐	🏠 🔥 🌳 📱 🚗
67 EXPAND COMBINED SOLAR AND ENERGY STORAGE PILOTS	☐	🏠 🔥 🌳 🌳
68 EXPAND ELECTRIC FLEETS, CHARGING INFRASTRUCTURE, AND ENERGY BACKUP TO REDUCE EMISSIONS AND SUPPORT EMERGENCY AND RESPONSE SERVICES	☐	🏠 🌳 📱 🚗
69 LEVERAGE AIRPORT MODERNIZATION AT LOS ANGELES WORLD AIRPORTS TO INCREASE RESILIENCE	☐	🏠 🌳 📱 🚗
70 IDENTIFY, ANALYZE, AND MITIGATE LOCAL OIL AND GAS INFRASTRUCTURE RISKS	☐	🏠 🔥 🌳 📱 🚗
71 ENHANCE PROTECTION OF CRITICAL DIGITAL ASSETS FROM CYBERATTACKS	☐	🏠 📱 🌐
72 LEVERAGE INFRASTRUCTURE INVESTMENTS LEADING UP TO THE OLYMPICS AND PARALYMPICS TO ADVANCE RESILIENCE GOALS	☐	🏠 📱 🚗 🚗 🌐

APPENDIX 2E: SUMMARY OF RESILIENT LOS ANGELES GOALS BY CHAPTER (HANDOUT)

Appendix A: Summary of Actions by Chapter

CHAPTER 4: PIONEERING AND COLLABORATIVE PARTNER



GOAL 12: USE CLIMATE SCIENCE TO DEVELOP ADAPTATION STRATEGIES CONSISTENT WITH THE PARIS CLIMATE AGREEMENT

ACTION	TIMEFRAME	SHOCKS/STRESSES
73 ENSURE CLIMATE RESILIENCE AND ADAPTATION PLANNING IS ROBUST AND CONSISTENT WITH THE PARIS CLIMATE AGREEMENT	☐	☔ ☀️ 💧 🌪️ 🏠 📊
74 TRANSITION TO ZERO-EMISSIONS TECHNOLOGY AT THE PORT OF L.A. TO REDUCE EMISSIONS, IMPROVE AIR QUALITY, AND BUILD DISASTER RESILIENCE	☐	🏠 📊 🌪️ 🌪️
75 TRANSITION TO FOSSIL-FUEL-FREE STREETS TO FIGHT AIR POLLUTION AND HELP TACKLE THE GLOBAL THREAT OF CLIMATE CHANGE	☐	🏠 📊 🌪️ 🌪️
76 INCORPORATE SEA LEVEL RISE MODELING INTO LOCAL PLANS	☐	☔ 🏠 🏠
77 IMPLEMENT STORMWATER PROJECTS THAT REDUCE POLLUTION AND CAPTURE LOCAL WATER SUPPLY	☐	💧 🌪️ 🌪️ 🚗
78 DEVELOP A STRATEGY TO SUSTAIN THE REGION'S BIODIVERSITY AND TREE HEALTH TO SUPPORT LONG-TERM ECOLOGICAL RESILIENCE	☐	💧 🌪️ 🌪️ 🌪️ ☀️ 🌱



GOAL 13: FOSTER A HEALTHY AND CONNECTED LOS ANGELES RIVER SYSTEM

ACTION	TIMEFRAME	SHOCKS/STRESSES
79 REVITALIZE, ENHANCE, AND PROTECT THE LOS ANGELES RIVER WATERSHED'S ECOSYSTEM AND BIODIVERSITY	☐	💧 🏠 🌪️ 🌪️
80 IDENTIFY STRATEGIES TO REDUCE POLLUTION IN THE LOS ANGELES RIVER SYSTEM	☐	🌪️ 🌪️ 🌪️ ☀️ 🌪️ 🌪️
81 PROVIDE EDUCATION PROGRAMMING TO MAINTAIN A HEALTHY WATERSHED AND KEEP ANGELENOS SAFE	☐	📖 🌪️ 🌪️ 🌪️ 🌪️ 🌪️
82 LEVERAGE THE LARIERWAY FOR EMERGENCY ACCESS AND EVACUATION ROUTES TO INCREASE CITYWIDE PREPAREDNESS AND DISASTER RESPONSE CAPACITY	☐	🏠 🌪️

Appendix A: Summary of Actions by Chapter



GOAL 14: STRENGTHEN REGIONAL SYSTEMS AND FORTIFY CRITICAL INFRASTRUCTURE

ACTION	TIMEFRAME	SHOCKS/STRESSES
83 COLLABORATE WITH CALIFORNIA CITIES TO ADVANCE REGIONAL SEISMIC SAFETY	☐	🏠 🏠
84 EXPLORE "PRECOVERY" FUNDING OPPORTUNITIES IN COLLABORATION WITH REGIONAL, STATE, AND FEDERAL PARTNERS	☐	🏠 🌪️ 🚗 📊 🌪️
85 FORTIFY CRITICAL LIFELINE INFRASTRUCTURE AND SUPPLY CHAINS THROUGH CONTINUED ASSESSMENTS, COORDINATION, AND INVESTMENT	☐	🏠 🌪️ 🌪️ 🚗 🚗 📊
86 ENCOURAGE INCREASED ACCESS TO EMERGENCY POWER FOR CRITICAL SERVICES	☐	🏠 🌪️ 📊 📊 🌪️
87 COORDINATE AMONG TRANSIT AGENCIES TO ADVANCE REGIONAL TRANSPORTATION AND TRANSIT RESILIENCE	☐	🏠 🌪️ 🚗 🚗 🚗
88 FORTIFY PUBLIC HEALTH AND HEALTHCARE CRITICAL INFRASTRUCTURE AND LEVERAGE PARTNERSHIPS WITH PUBLIC HEALTH ORGANIZATIONS TO IMPROVE COMMUNITY HEALTH AND WELLNESS	☐	🏠 🌪️ 🏠
89 EXPAND CLIMATE AND EMERGENCY PREPAREDNESS THROUGHOUT OUR LOCAL FOOD SYSTEM	☐	📷 🌪️ 🏠

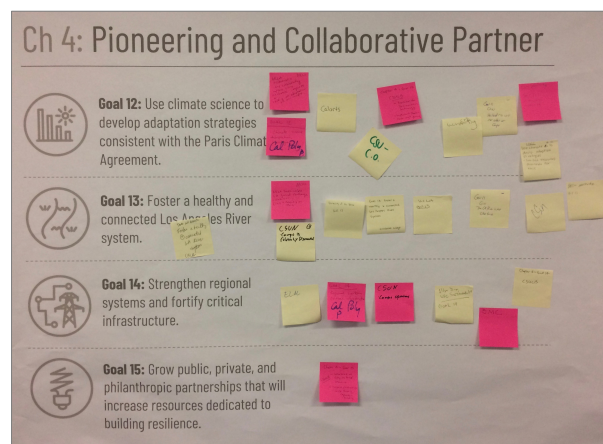
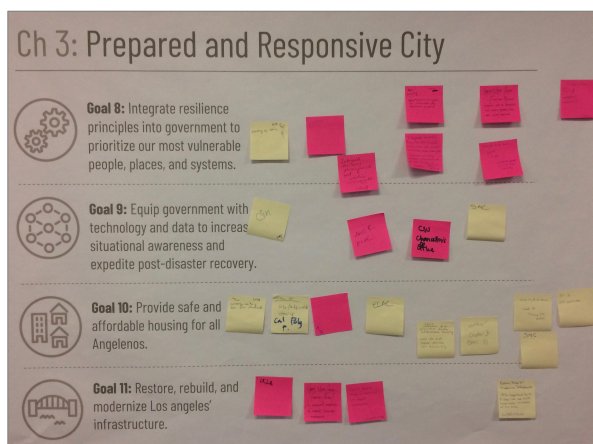
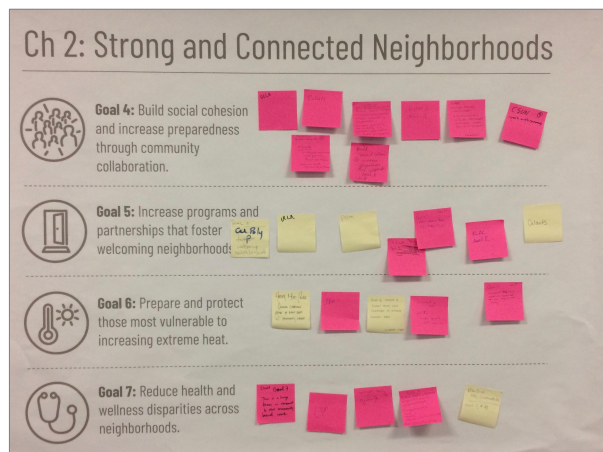
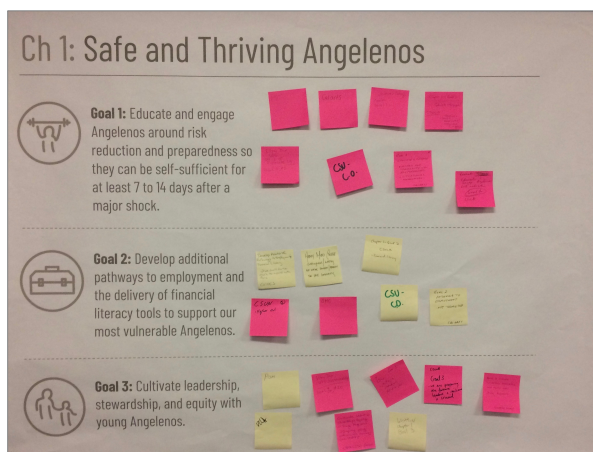
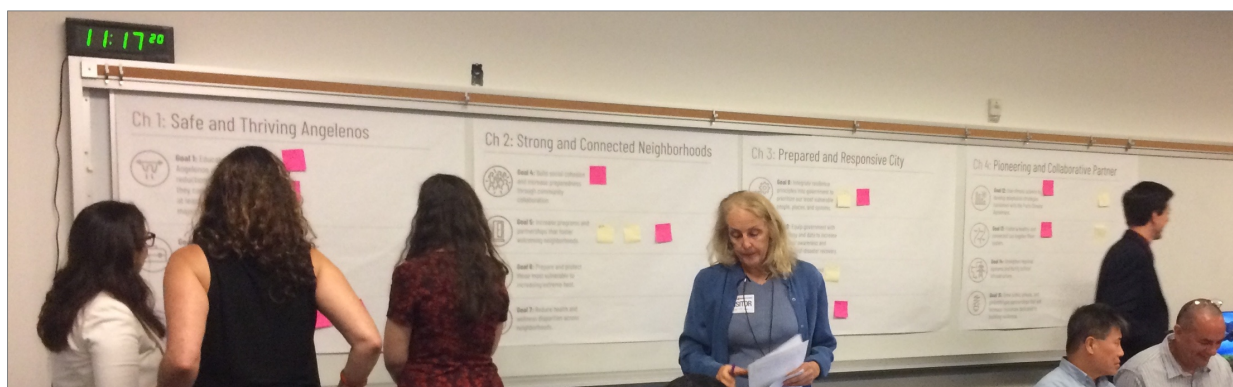


GOAL 15: GROW PUBLIC, PRIVATE, AND PHILANTHROPIC PARTNERSHIPS THAT WILL INCREASE RESOURCES DEDICATED TO BUILDING RESILIENCE

ACTION	TIMEFRAME	SHOCKS/STRESSES
90 LAUNCH AN EARTHQUAKE EARLY WARNING SYSTEM	☐	🏠 🌪️ 📊
91 FURTHER THE MARKETPLACE FOR SEISMIC-RESILIENT PIPES	☐	🏠 📊 🌪️ 🌪️ 🌪️
92 LEAD DEVELOPMENT OF A CROSS-SECTOR CYBERSECURITY INNOVATION INCUBATOR	☐	📊 🌪️
93 ADVANCE COUNTER-TERRORISM EFFORTS IN THE SOUTHERN CALIFORNIA REGION	☐	📊 🌪️ 🌪️
94 EXPAND EDUCATION AND CAPACITY-BUILDING TO PROMOTE PLURALISTIC VALUES AND SOCIAL INCLUSION	☐	📊 📊
95 INTEGRATE NEW AND EMERGING SCIENCE INTO POLICY THROUGH PARTNERSHIPS WITH ACADEMIC, LOCAL, STATE, AND FEDERAL SCIENTISTS	☐	🌪️ 🏠 📊 🌪️ 🌪️ 🌪️
96 COLLABORATE WITH CITIES TO BUILD RESILIENCE AROUND THE GLOBE	☐	📊 🚗 🏠 🌪️ 🌪️ 🏠

APPENDIX 3A: MAPPING CAMPUS PRIORITIES AGAINST RESILIENT LOS ANGELES

In an effort to identify where campus resilience priorities may align with the goals presented in *Resilient Los Angeles*, workshop participants were asked to place a pink “Post-It” note next to goals that “resonated” with them and a yellow “Post-It” note next to goals that “did not resonate” at all. Each participant received two pink and two yellow “Post-It” notes, and facilitators encouraged them to write down any information that may clarify why they chose a particular goal. The results of this exercise are detailed in the following pages.



APPENDIX 3B: MAPPING CAMPUS PRIORITIES AGAINST RESILIENT LOS ANGELES

Chapter 1: Safe and Thriving Angelenos

Goal	Resonates	Does Not Resonate
Goal 1: Educate and engage Angelenos around risk reduction and preparedness so they can be self-sufficient for at least 7 to 14 days after a major shock.	Pomona College California Institute of the Arts (x2) <ul style="list-style-type: none"> • Inform our community on preparedness • Situational awareness Whittier College University of Southern California CSU Office of the Chancellor CSU Los Angeles CSU Long Beach <ul style="list-style-type: none"> • Develop and launch coordinated/ integrated approach 	
Goal 2: Develop additional pathways to employment and the delivery of financial literacy tools to support our most vulnerable Angelenos.	CSU Northridge Santa Monica College	Cal Office of Emergency Services <ul style="list-style-type: none"> • We don't do too much to assist with this Harvey Mudd College <ul style="list-style-type: none"> • Not a major concern/problem for the HMC community California Institute of the Arts <ul style="list-style-type: none"> • Not there yet CSU Long Beach CSU Office of the Chancellor
Goal 3: Cultivate leadership, stewardship, and equity with young Angelenos.	University of Southern California CSU Northridge (x3) <ul style="list-style-type: none"> • Inspire young professionals • Encourage civic leadership • We are preparing future leaders, and resilience is crucial • Job training • Internships, full-time jobs Occidental College	University of California, Los Angeles Pomona College Whittier College

APPENDIX 3C: MAPPING CAMPUS PRIORITIES AGAINST RESILIENT LOS ANGELES

Chapter 2: Strong and Connected Neighborhoods

Goal	Resonates	Does Not Resonate
Goal 4: Build social cohesion and increase preparedness through community collaboration.	University of California, Los Angeles California Institute of the Arts (x2) <ul style="list-style-type: none"> Working with local partners and other higher education institutions CSU Long Beach <ul style="list-style-type: none"> Integrate resilience into planning at campus scale Increase local community outreach CSU Los Angeles CSU Northridge	
Goal 5: Increase programs and partnerships that foster welcoming neighborhoods.	University of California, Los Angeles (x2) East Los Angeles College CSU Northridge <ul style="list-style-type: none"> More interaction between city, students, and campus 	Cal Poly Pomona Pomona College California Institute of the Arts
Goal 6: Prepare and protect those most vulnerable to increasing extreme heat.	CSU Northridge University of La Verne <ul style="list-style-type: none"> HVAC implementation Retrofits University of California, Los Angeles	Harvey Mudd College <ul style="list-style-type: none"> Ongoing Claremont effort to plant trees with community support Occidental College
Goal 7: Reduce health and wellness disparities across neighborhoods.	CSU Northridge (x2) <ul style="list-style-type: none"> This is a huge focus in research and our community-based work University of California, Los Angeles	University of Southern California

APPENDIX 3D: MAPPING CAMPUS PRIORITIES AGAINST RESILIENT LOS ANGELES

Chapter 3: Prepared and Responsive City

Goal	Resonates	Does Not Resonate
Goal 8: Integrate resilience principles into government to prioritize our most vulnerable people, places, and systems.	<p>University of California, Los Angeles (x2)</p> <ul style="list-style-type: none"> Working on this Adapting more mitigation measures for vulnerable students, populations <p>Pomona College</p> <p>CSU Los Angeles</p> <p>Cal Office of Emergency Services</p> <ul style="list-style-type: none"> We are constantly championing preparedness to all levels of government with focus on AFN planning <p>University of La Verne</p> <ul style="list-style-type: none"> Sustainability included in the CP of the university <p>Harvey Mudd College</p> <ul style="list-style-type: none"> Climate and resilience planning must be integrated in campus strategic planning and vision/operations 	
Goal 9: Equip government with technology and data to increase situational awareness and expedite post-disaster recovery.	<p>East Los Angeles College</p> <p>Santa Monica College</p> <p>CSU Office of the Chancellor</p>	CSU Northridge
Goal 10: Provide safe and affordable housing for all Angelenos.	<p>University of California, Los Angeles</p> <ul style="list-style-type: none"> Working on this for our students 	<p>Cal Poly Pomona</p> <p>East Los Angeles College</p> <p>Whittier</p> <p>CSU Northridge</p> <p>University of La Verne</p> <ul style="list-style-type: none"> Housing for students? <p>Santa Monica College</p>
Goal 11: Restore, rebuild, and modernize Los Angeles' infrastructure.	<p>Occidental College</p> <p>University of California, Los Angeles</p> <p>Harvey Mudd College</p> <ul style="list-style-type: none"> Working on this for our students 	<p>Cal Office of Emergency Services</p> <ul style="list-style-type: none"> So important, but I feel we don't have much interaction with this one

APPENDIX 3E: MAPPING CAMPUS PRIORITIES AGAINST RESILIENT LOS ANGELES

Chapter 4: Pioneering and Collaborative Partner

Goal	Resonates	Does Not Resonate
Goal 12: Use climate science to develop adaptation strategies consistent with the Paris Climate Agreement.	<p>Cal Poly Pomona</p> <p>University of California, Los Angeles (x2)</p> <ul style="list-style-type: none"> UCLA scientists are collaborating with the City on climate impacts and looking at adaptation on our camps <p>CSU Northridge</p> <ul style="list-style-type: none"> Emissions reductions Ecological health <p>CSU Long Beach</p> <ul style="list-style-type: none"> Transition to zero-emissions technology Implement stormwater management planning 	<p>CSU Office of the Chancellor</p> <p>California Institute of the Arts</p> <p>CSU Northridge</p> <ul style="list-style-type: none"> Sea-level rise will not affect our campus
Goal 13: Foster a healthy and connected Los Angeles River system.	<p>University of California, Los Angeles</p> <ul style="list-style-type: none"> UCLA Sustainability Grand Challenge collaboration with City and County 	<p>CSU Northridge (x4)</p> <ul style="list-style-type: none"> Campus is relatively disconnected <p>University of La Verne</p> <p>Occidental College</p> <p>CSU Los Angeles</p>
Goal 14: Strengthen regional systems and fortify critical infrastructure.	<p>Cal Poly Pomona</p> <p>CSU Northridge</p> <p>Santa Monica College</p>	<p>East Los Angeles College</p> <p>University of Southern California</p> <p>CSU Long Beach</p>
Goal 15: Grow public, private, and philanthropic partnerships that will increase resources dedicated to building resilience.	<p>CSU Long Beach</p> <ul style="list-style-type: none"> Collaborate with City to build resilience Increase partnerships (ex. funding, capacity building) 	

APPENDIX 4: PRE-WORKSHOP SURVEY

Two weeks prior to the workshop, the Mayor's Office of Resilience asked prospective workshop attendees to participate in a brief survey. The purpose of this survey was to assess where universities and colleges were in the resilience planning process at the time and to gauge particular areas of interest. Eighteen attendees responded.

1. Does your campus have a resilience officer or someone responsible for resilience planning?

- Yes: 83%
- No: 17%

2. If your institution does not have a dedicated campus resilience office(r), who would be the person most likely to lead resilience planning efforts? *

- | | |
|-------------------------------|------------------------------|
| • Sustainability Manager: 39% | • Other - Faculty Member: 6% |
| • Emergency Manager: 17% | • Other - AVP or COO: 6% |
| • Public Safety Officer: 28% | • Other - Risk Manager: 6% |
| • Facilities Director: 57% | |

** Note: percentages do not add to 100% since survey participants may have marked multiple options.*

3. Has your institution formed a working group, task force, or committee with a resilience planning mandate?

- Yes: 56%
- No: 44%

4. Do you plan to develop a formal resilience strategy within the next two years?

- Yes: 39%
- No: 6%
- Not Sure: 44%

5. What risks would you want your campus resilience strategy to address? *

- | | | |
|------------------------|-----------------------|-----------------------|
| • Earthquake: 89% | • Flooding: 67% | • Drought: 39% |
| • Fire: 72% | • Climate Change: 83% | • Infrastructure: 61% |
| • Landslides: 6% | • Air Quality: 72% | • Inequality: 61% |
| • Heat: 89% | • Heat Island: 61% | • Homelessness: 39% |
| • Food Insecurity: 50% | • Safety: 6% | |

** Note: percentages do not add to 100% since survey participants may have marked multiple options.*

6. What are the primary challenges your campus faces in addressing these risks? *

- | | |
|---------------------------------------|------------------------------------|
| • Limited (or lack of) staff and time | • Limited (or lack of) funding |
| • Lack of awareness/understanding | • Limited community engagement |
| • Lack of leadership/political will | • Limited stakeholder coordination |

** Participants filled in their own responses, all of which fell into one of these six issue areas.*

APPENDIX 5: CAMPUS RESILIENCE CHALLENGE OPTIONS

POLICY

PURPOSE

To provide students with the opportunity to engage in assessing and formulating resilience policy at the campus, community, or city level.

PARTICIPANTS

Policy and Planning Students

OUTPUTS

Resilience Assessment
Policy Paper
Conference Presentation

DESIGN

PURPOSE

To think creatively and spatially about resilience in a competitive setting

PARTICIPANTS

Design and Planning Students

OUTPUTS

Survey of Best Practices
Design Competition
Conference Presentation

ACADEMIC

PURPOSE

To encourage applied research in resilience across a range of disciplines (planning, policy, psychology, the sciences, etc.)

PARTICIPANTS

Professors and Researchers

OUTPUTS

White Paper
Policy Paper
Research Project

INSTITUTIONAL

PURPOSE

To explore the resilience-oriented policies, programs, and initiatives academic institutions either have in place or are developing (via Second Nature).

PARTICIPANTS

Sustainability Managers
Facilities Managers
Emergency Managers

OUTPUTS

Campus Resilience Plan

COMMUNITY

PURPOSE

To foster stronger relations between campuses and communities by encouraging more active, frequent, and novel approaches to engagement

PARTICIPANTS

Students, Alumni + Administration

OUTPUTS

Community Outreach Strategy
Stakeholder Engagement Metrics
Community Programming

PROJECT

PURPOSE

To develop and implement a discrete resilience-oriented project on campus or in the community (potentially in partnership with the City)

PARTICIPANTS

Sustainability Managers
Facilities Managers
Emergency Managers

OUTPUTS

Pilot Project
Implementation Plan