#### 1. Social Resilience

Specific challenges related to implementing social resilience initiatives, such as public health, community adaptive capacity, social cohesion, and community-based solutions.

#### Funding

Move from

funding to

annual

contingency

appropriations

funding for

Continue to provide

organizations to

community-driven

Funders should hire

community leaders and advocates,

which can be via

paid contracts as

outreach in hiring

advisors or by

authentic DEI

for positions

efforts for their lived

support these

experiences.

Resilience

Hubs

Adequate funding frontline communities who are doing, frontline education.

Funding is often place-based, which can perpetuate inequality, (e.g. low-income and rural areas)

Funding can be difficult to access for the communities who need it the most (internet-based applications, time to write proposals,

How do we fund purchase of very expensive coastal property for managed retreat? If physical retreat - to wheremany areas have limited receiver locations. When in the process of adaptation this

connecting funding/resources to adaptation plans **Funders that** are more responsive and flexible to community needs

conservative leadership, they may pose barriers to folks trying to address politicized topics like climate equity

In areas with

Politicized us/them mentality, especially perspectives that pit low-income people against each other by race

Disconnect

between local

government

community

and

efforts

Lack of

change.

#### relationships

Putting power in know which doing the work.

championship of issues at leadership level that is needed to make significant

Building relationships / repairing broken relationships between communities and government

#### politics

Identify and use inclusive language that transcends us/them approaches

May come down to framing the issue not as "Climate Justice", but as \*Empowering localities/homeowner s/etc to protect themselves from fire/drought/heat etc."

the hands of people who are part of the community/who organizations are

Create collaborative or provide awareness to collaborative via a clearinghouse directory to assist with awareness to available funds and partnerships.

Supporting Community-Based Organizations by providing funding to include them in the capacity-building conversations and engagement with

lack of time/energy to participate in community-based initiatives on an

communities.

Frontline communities experiencing trauma, fatigue, basic security needs.

How can communities move quickly and still as one? We need

How to bring various members of the community together that don't usually work or collaborate together, and maybe have history together that diminishes responsiveness to working together.

Lack of public discussion around adaptation and resilience.

### Capacity/ cohesion

Invest in community engagement -> pay community volunteers and stakeholders

Identify and use inclusive language that transcends us/them approaches

Use the Sondeo Methodology to promote active and constructive listening between those who may not usually listen to each other.

capacity/social and come up with community-based

Economy can be used as an excuse to not implement adaptation strategies, (e.g.

gentrification, high housing prices, lack of stable employment, etc, that inhibit a sense of continued community

Rise in the cost of housing following the loss of housing due to fire and flood.

perception that

investment and

stability

undermines growth)

conservation

### economy/ systemic

Roadmap for a repeatable process to create sustainable communities in any unserved community.

agency) - available to owners and renters ("The workgroup recommends ... \$10,000 per household" flat settlement -Commission on Catastrophic Wildfire **Cost and Recovery** 2019 report p. 17-

Community cohesion to talk abou climate change issue: solutions is limited in rural communities.

Building independence in energy, food, water supply for communities, particularly in urban areas.

#### 2. Built Infrastructure

Specific challenges related to implementing built infrastructure initiatives, such as transportation, buildings and housing, energy, and critical infrastructure solutions.

Engaging Public in Decision-Making and Cost-Sharing

\$4000/household per year

Focusing local input to state on feasibility and utility of HSR. Is this where we should put \$100-200 billion? Integrated Planning and Governance/ Policy

Demands regional solution, but local jurisdictions have implementation authority.

Sense of urgency/priority Local plant palettes widely available with locally native species - distribute to property owners to implement. Supply chain - availability of plants that are ready to install.

Need more rapid EV charging infrastructure on freeways.

Governance emergency action? Need regional coordination to replace invasive weeds with local native ecosystems and restored hydrological function along right of ways and navigable waters.

Determining SLR planning assumptions, e.g. 3 feet by 2050 vs. 6 ft. by 2070+? If we believe 6 feet is coming, that changes what we should be doing NOW.

Influencing land-use decisions on development

change public perception about what the 'ideal' built environment should look like Aging sewer conveyance infrastructure - not enough funding to repair it.

Regional agencies issues - SILOS??

Restoring hydrology and vegetation where we have paved and drained it in the past in order to restore ecological and hydrological function (rain)

Local government not designed for emergency/urgent work, but the timeline for adaptation is very quick.

Land use and zoning

Its permanence and reliance once built

Need driving force/steering committee and emergency resources and authorizations for rapid action.

Density of built areas

Longer and more intense fire seasons

Affordable, implementable nature based climate solutions in dense urban built environs

### 2. Built Infrastructure (pg 2)

Specific challenges related to implementing built infrastructure initiatives, such as transportation, buildings and housing, energy, and critical infrastructure solutions.

Resistance

#### Funding/ Resources

funding streams must be used for transportation improvement projects. Difficult/impossible to use for adaptation projects, especially for adaptation solutions outside of state ROW. even if these projects

Increased public private partnerships

### **Pollution**

**Need water** bodies to capture water to equalize wastewater treatment.

Microplastics

in the water

and air

**EV Charging** Infrastructure

Data solutions -GIS, scale

Dwindling water supply, but construction and growth continues.

Political will

#### Scaled Finance

Funding \$\$ Local input and will, impact to local and regional economy.

Focusing local input to state on feasibility and utility of HSR. Is this where we should put \$100-200 billion?

Personnel for

tracking?

training?

inspecting?

Vegetation for habitation and ecosystem function

Pollution

concentration

supply drops.

concentration.

implement

increasing as water

Toxicity. Need to

measures to prevent

Flooding and Sewer overspills due to bigger design storms.

Longer and more intense fire seasons

Pollution concentration increasing as water supply drops. Toxicity. Need to implement measures to prevent concentration.

Is it possible to make charging EVs a subscription

and subsidize it?

Fyi, Caltrans has a lot of GIS resources on CC https://svctenvims.dot .ca.gov/DEA\_Library/

Engineers build based on historic data, which does not reflect what is likely to happen with climate change.

Nimby

### Prop 13 Reform

Need driving

emergency

force/steering

resources and

rapid action.

authorizations for

committee and

Management Plan identified 45 billion in SLR need by 2100need federal support addresshttps://dot.ca. gov/programs/asset-m anagement/state-high way-system-plan

Fyi, latest State

Highway

Bay Area adaptation cost estimates: \$150B by 2050, NOT counting public infrastructure. This is \$4K per household per year ongoing.

Lack of coastal resource engineers

Storm water management - use of runoff **Need more** rapid EV charging infrastructure on freeways.

SOLUTION: Provide public GIS maps of all CC impacts that are high resolutions. THIS HAS NOT BEEN DONE BY ANY AGENCY IN CA TO DATE - this includes Caltrans

Existing GIS displays whos Climate Change layers provided by CA government - in the 50-100 mile range per pixel. We don't have detailed maps that show impact of infrastructure down to the mile range.

projections accuracy IPCC

We need GIS maps for all Climate Change issues provided FREELY, that pixelate at the 1 mile range and not the 50-100 mile range as is now.

# 2. Built Infrastructure (pg 3)

Specific challenges related to implementing built infrastructur

our most vulnerable communities and invite them to participate in infrastructure planning decisions. Give them incentives to participate. Priorities for infrastructure should come from the frontline communities

Public awareness and engagement

dings and housing, ene

renewable power generation.
Conversion of organics and biomass for power regeneration and reuse as fertilizer/materials.

Distributed

Urban

local

agriculture for

consumption

frastruct Cities with

Cities with lower GHGs have more access to certain types of grants

> Telecommute tax credits for companies and individuals.

Neighborhoods with higher densities and mixed uses pay lower taxes per sf

Green Revolution

Develop regional

address highest

priority adaptation

needs and include

leveraged private

such as energy resilience and EV infrastructure

finance for elements

ballot initiatives that

Regional planning for connectivity of vegetated areas and capture and use of runoff - vegetation with local native plants (habitat restoration/connectivity).

Regional TDRs and SEPs

Invest in water recycling infrastructure.

Stormwater biofiltration systems included in right of way design; uses local vegetation.

Restore surrace water features to store water - maintain optimal levels for ecosystem function/service for water quality and habitat purposes - allow for draws to supplement water in wastewater treatment in dry years.

Create a Statewide mapping division that resources Federal datasets (GIS Mapping) and incorporates municipal and other data; works with agencies to update the data.

Regional collaborations to remove invasive weeds and replace with local native ecosystems/restore hydrology (capture and reuse to water plants).

More aggressive CA

mitigate and adapt

to climate change.

building code

requirements to

Support Regional approaches to address Sea Level Rise

Regional Collaboration. BCDC's Bay Adapt (https://www.bayadap t.org/) is a good example. Increased early
coordination/teaming
up between State and
Local/Regional
Agencies to generate
more interest in
private public
partnerships to
generate funding

Allow communities to charge a fee for stormwater quality

Need to replace the gas tax with VMT tax.

Use local municipal bonds (referendums) to Leverage Grant funding

Funding for regional cross-sector advanced integrated planning and implementation..

Eliminate parking minimum requirements for development.

Minimum density for all types of development

Square foot "tax" for houses above a certain size, based on number of bedrooms / hh size Walkscore minimums

Second home tax / vacancy tax

Creative financing.
Grant opportunities (e.g., FEMA - BRIC).

VMT fees

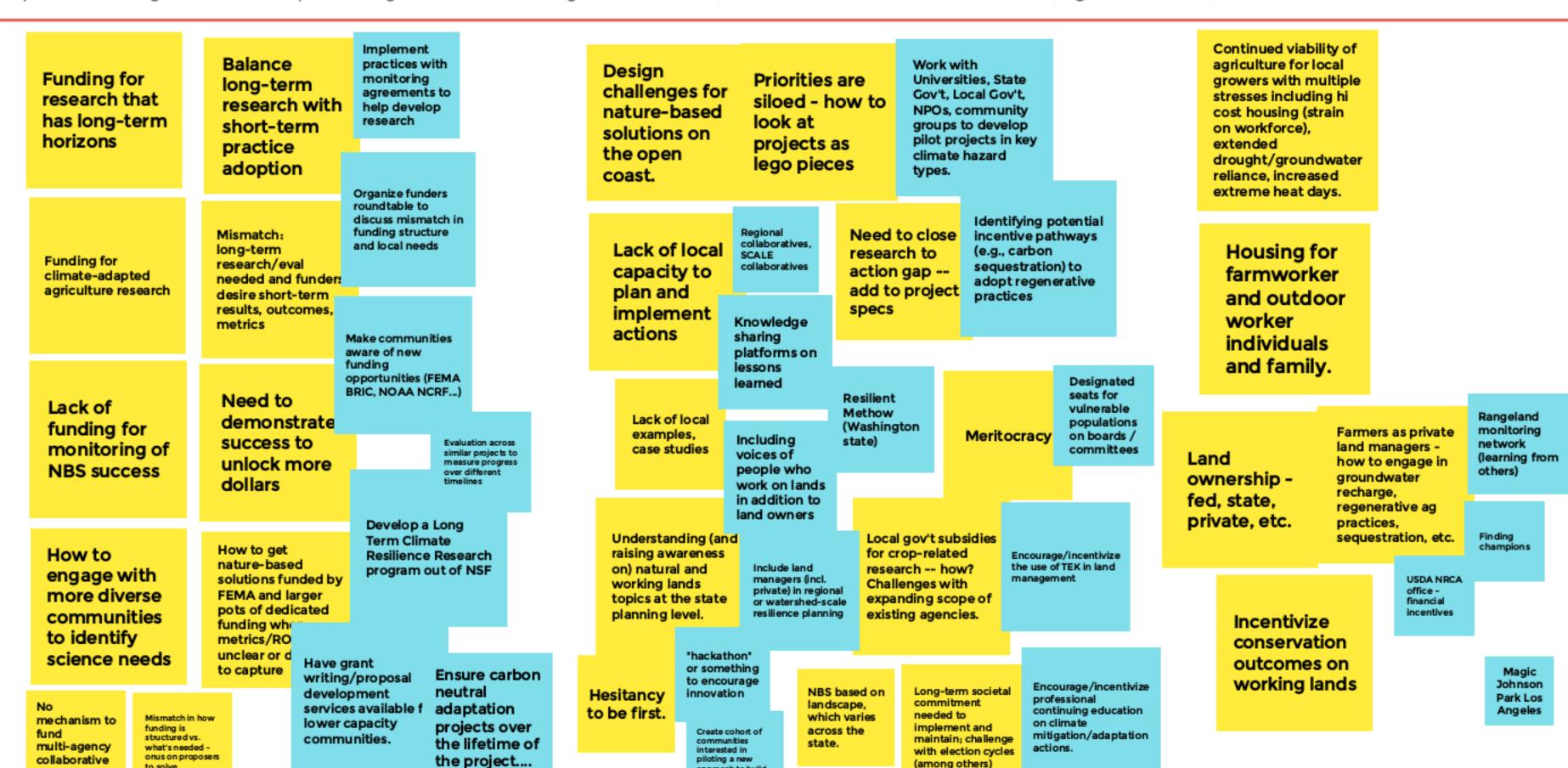
Carbon Taxes More state/federal investment in rail, transit and active transportation rather than roads. More
enforcement/account
ability for local hiring,
workforce
development,
economic justice
efforts.

Infill and greenbelts

### 3. Natural & Working Lands

efforts

Specific challenges related to implementing natural and working lands solutions, such as forest/watershed restoration, agriculture, TEK, and coastal solutions.



approach to build

enough support for

### 4. Landscape-level Adaptation

Specific challenges related to implementing landscape-level adaptation solutions, such as addressing land use patterns, managed retreat, and climate displacement/migration.

How will the ecologies of various areas change with Climate disruption? Will forests come back or more hot weather species dominatechaparral?

Natural landscape boundaries do not always follow iurisdictional boundaries

how to use landscape ecology better for climate resilience projects?

Balancing different land use needs with climate impacts. I.e. housing (to address housing crisis), while resilience tracking, shared definition, scaling up

Learning from demonstration projects and how to scale up

Landscape-scale

expensive. State/fed

sufficient to cover the

costs so need to find

ways to develop

existing revenue

streams to fund.

projects are

funding is not

solutions for jurisdictions/ communities with varying levels of resources

Permitting

hurdles and

time lag for

adaptation

projects

implementing

creating scalable

Building "resilience of" into other types of projects, i.e. making infrastructure resilient

how to track

resilience and

projects, also

how to fund

monitoring

success of

Lack of political / social will to make hard decisions that require trade-offs

regional coordination,

political will, trust

Regional

coordination

in multiple

jurisdictions

building trust between government agencies and community leaders

As the climate changes, are the plant communities able to adapt quickly enough? When we advocate for native plant communities -do we need to consider this?

Increasing tree canopy is a common and favorite solution that residents offer for adapting to extreme heat. However, trees need water, grow slowly, and we have drought, too.

needing to increase avoiding building in hazard zones (SLR or fire or other)

> science to application/adaptatio n, research needs

Through State Adaptation Strategy and ICARP, state is developing resilience metrics... (please!) participate in the state process!

coordinating vulnerability and adaptation plans among multiple agencies

Managing different hazards / climate impacts at the same time/place, I.e. make sure you're not adapting for one, leading to maladaptation on another.

promote collaborative. "un-siloed" planning/working groups

Utility-scale solar can increase heat in surrounding areas + transmission lines that transmit the electricity from these areas can become potential sources of ignition.

promote rooftop solar and community microgrids (don't need transmission lines)

develop

shared resilience tracking methods

## 4. Landscape-level Adaptation (page 2)

Specific challenges related to implementing landscape-level adaptation solutions, such as addressing land use patterns, managed retreat, and climate displacement/migration. managed housing wildfire resilience insurance retreat Balancing different How do we land is less Insurance pulling land use needs with Managed to wait long expensive in deal with climate impacts. I.e. out of high hazard retreat: Land enough when needing to increase "stealth" zones - forcing the WUI so housing (to address in Los Angeles communities to use houses are not housing crisis), while CA FAIR plan, which

Managed retreat: after homes burn, people wish to rebuild - if we try to

considered a taking.

is very

expensive

restrict, this is

purchase properties rent it back (SB83). trading land (move houses out of beach to other open space, design resilient communities, cons. developing current open space, trading one climate stressor/risk for

worth much

and buy them

very expensive coastal properties - and When do we do so as SLR increases? Where can such managed retreat homes be located in either densely developed areas or areas with high natural resource or environmental hazard

talking about it! depoliticizing the conversation to be able to talk about solutions and options. developing local programs/committees to negotiate.

managed retreat policies

Imagination of the single family home is the default

making assistance

programs easy to

e.g. buyouts

understand/navigate.

Some necessary adaptation measures may not be popular, such a managed retreat or rebuilding some infrastructure in a safer location

avoiding building in

hazard zones (SLR or

housing need and

build? (examples

element - where to

from Caroline, Jack)

fire or other)

LA County survey example - people don't want to retrofit because they think property taxes will increase

development continues to happen there.

> Fire resilient construction AND design

resilient housing and designs of communities (roads, etc.)? reduce vulnerability.

Utility-scale solar

can increase heat in

surrounding areas +

transmission lines

that transmit the

electricity from

these areas can

After wildfire events: people don't have an alternate place to go (both short-term, and long-term).

become potential sources of ignition. required firewise retrofitting can be difficult for

residents on fixed

income in areas at

risk of wildfires.

State how to create fire

insurance doesn't incorporate landscape-adaptation strategies in their ris analysis, therefore not seeing the full resilience of a community

is expensive to

homeowner and th

working with insurance companies to incorporate landscape scale adaptation strategies in their risk analysis. This creates incentives to build landscape-scale strategies

insurance moving forward, especially in high-risk/ high-vulnerable areas

migration

identifying receiving communities for climate-displaced groups

"Climate gentrification" as those who can afford to voluntarily relocate choose specific, desirable areas.

Resistance to compact, infill development in relatively less hazard areas

retrofitting cost - LA County survey results

Managed retreat: residents want to stay and defend (during wildfires)

# What would you like to focus on at future Track 3 workshops?

How various stakeholders can de-politicize the conversation around adaptation

Case studies of effective implementation

Cases of measuring success and impact for climate adaptation (or climate action planning)