

An aerial photograph of San Francisco, showing the city's dense urban landscape and the San Francisco Bay in the background. The image is overlaid with a semi-transparent teal color.

ConnectSF

Scenario Planning

SPUR SF

June 13, 2018

connectsf@sfgov.org

connectsf.org

Today's Agenda

- Overview of ConnectSF
Doug Johnson, San Francisco Planning Department
- Why Scenario Planning?
Nicole-Anne Boyer, Adaptive Edge Consulting
- What Did We Learn?
Chester Fung, Arup
- Q&A
- Theory, Practice, Challenges, and Breakthroughs
Nicole-Anne Boyer
- Possibilities for Other Planning Projects
Chester Fung
- What's Next for ConnectSF?
Doug Johnson
- Q&A

An aerial photograph of San Francisco, California, showing the city's dense urban landscape. The image is overlaid with a semi-transparent teal color. The text "ConnectSF Overview" is centered in the upper half of the image in a white, serif font. The background shows the city's skyline, including the Transamerica Pyramid and other high-rise buildings, with the Golden Gate Bridge visible in the distance on the left.

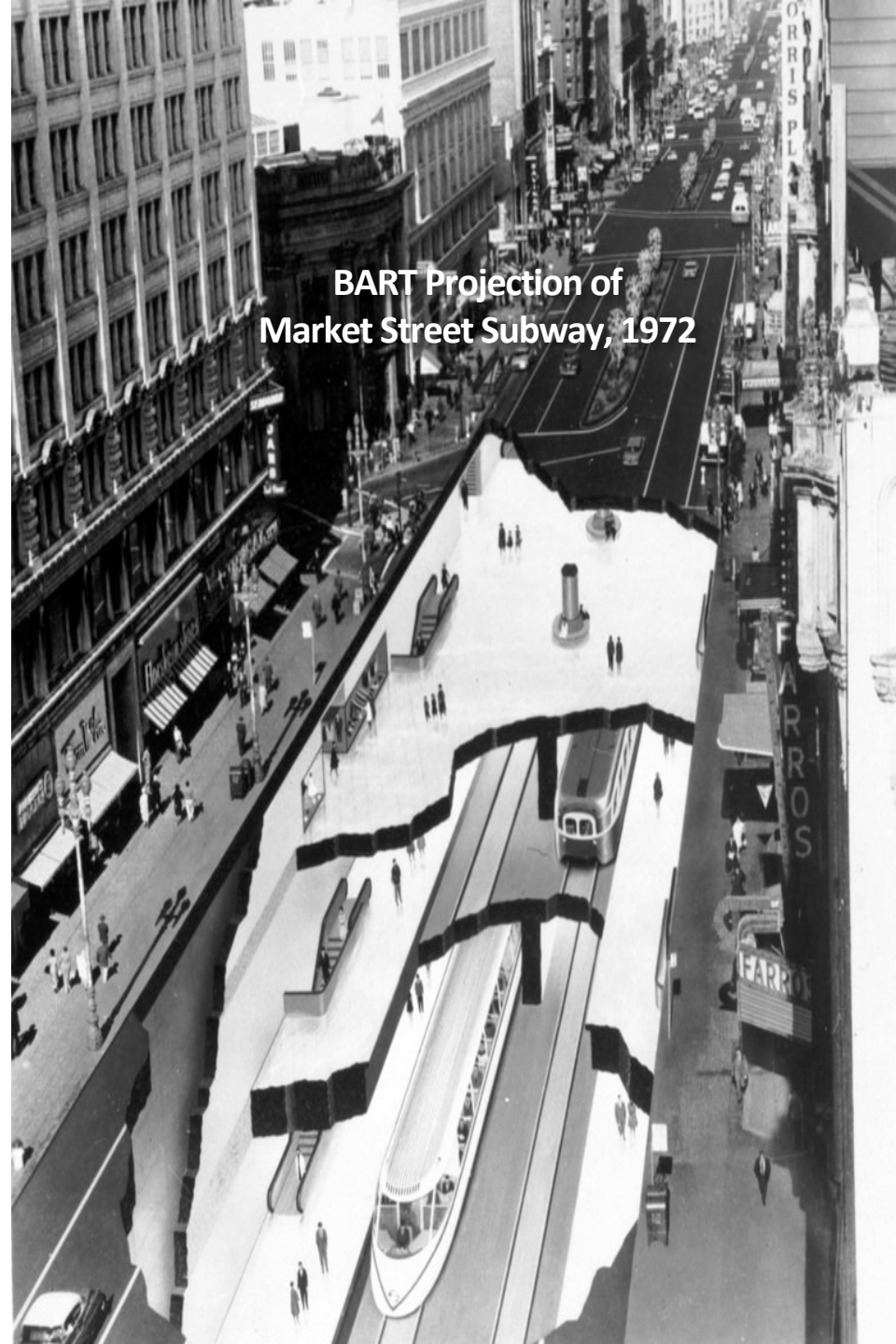
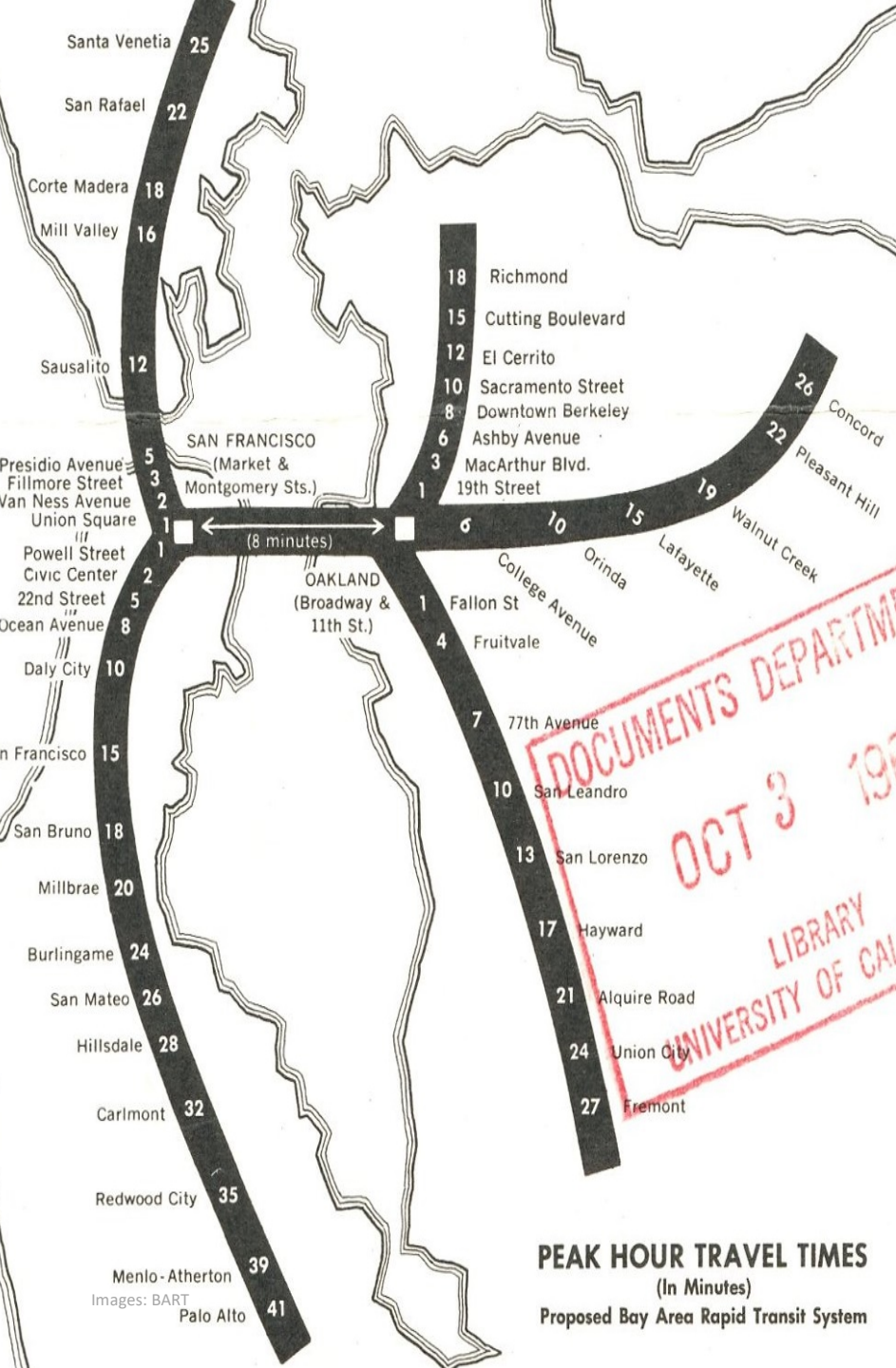
ConnectSF Overview



Richmond District, 1880s



Lincoln Way near Sunset, 1908



Purpose

***ConnectSF** aligns our agencies through a ground-up process to identify long-term transportation projects and policy priorities*

About the Program

- **50-year transportation vision** created with city agencies (**we are here**)
- Phase 2 is about the **projects** and **policies** needed to achieve the vision
- Phase 3 includes San Francisco two transportation **policy and action oriented documents**



Process

SPRING 2017

SUMMER 2017

FALL 2017

WINTER 2017-18



Pop-ups and
Surveys



Input on
Scenarios



Public
Outreach



Public Outreach on
Plans and Studies



Co-Learning and
Futures Primer



Scenario Building
Workshop



Scenario
Check-in



Strategic Implications
Workshop



Guidance on
Plans and Studies



Conduct
Research



Develop and
Refine Scenarios



Study Technical
Implications



Policy
Implementation and Funding
Plans for People, Roads and Transit

Outreach Summary



FOCUS
GROUPS

125

PARTICIPANTS

3

LANGUAGES
OFFERED: CHINESE,
ENGLISH, SPANISH

1

YOUTH
GROUP



ONLINE
SURVEYS

5,300

RESPONDENTS

4

LANGUAGES OFFERED: CHINESE,
ENGLISH, SPANISH, FILIPINO



TARGETED
OUTREACH

60+

ORGANIZATIONS
ENGAGED

470

POP-UP
VISITORS

700

POP-UP
RESPONSES



Authentic civic
engagement that
reaches all groups

Getting around SF
and the region is
easy and fast

Safe, clean,
and secure

Affordability

Active, effective
government

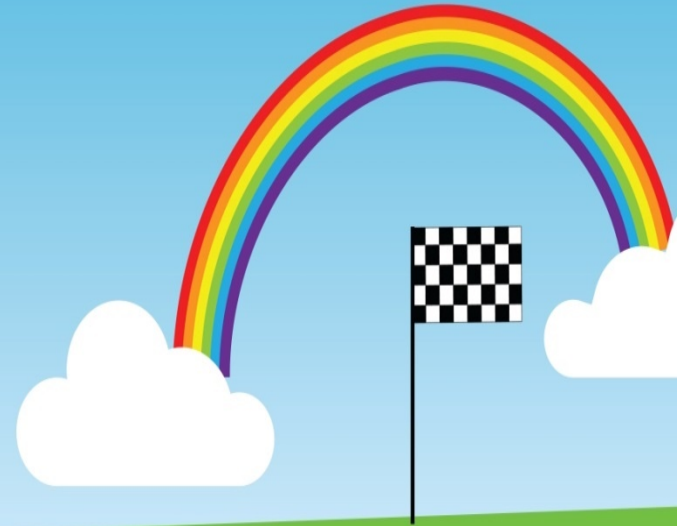
Retain what makes
San Francisco special

What we heard from San Franciscans

Photo: Linda Meckel

ConnectSF

YOUR PLAN.



REALITY.

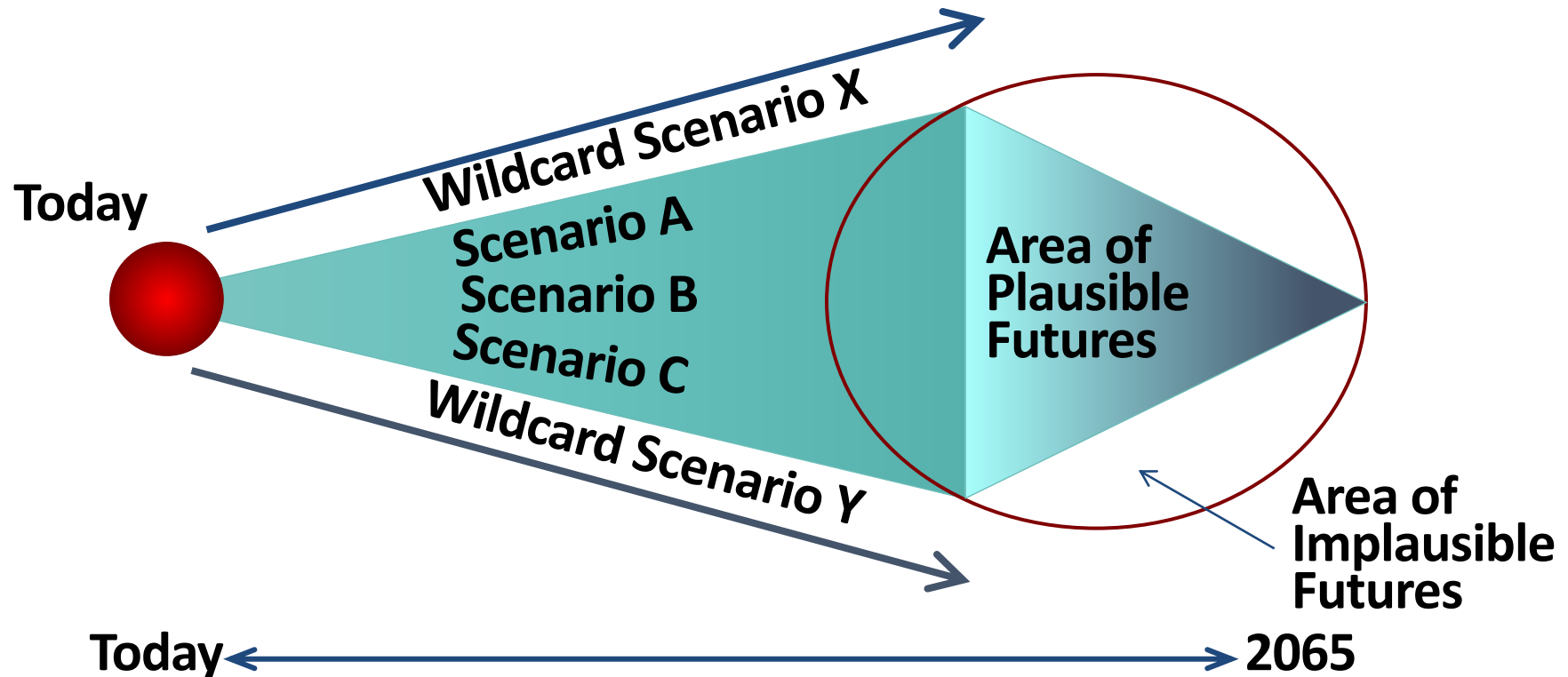


An aerial photograph of San Francisco, California, showing the city's dense urban landscape and the San Francisco Bay in the background. The image is overlaid with a semi-transparent teal color. The text "Why Scenario Planning?" is written in a large, white, serif font across the upper left portion of the image.

Why Scenario Planning?

What is scenario planning? Why use it?

1. A structured method for **thinking about the future** and making flexible long term plans and decisions under conditions of *uncertainty and complexity*



Preparing for Unpredictable and Predictable Surprises



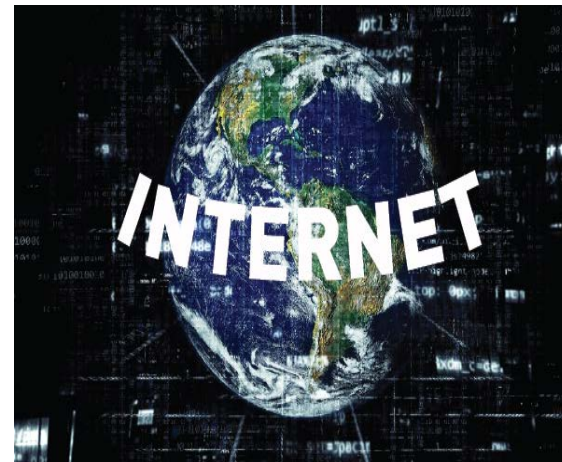
Social Transformations



California's Drought



Transformative Technologies



Volatile

Uncertain

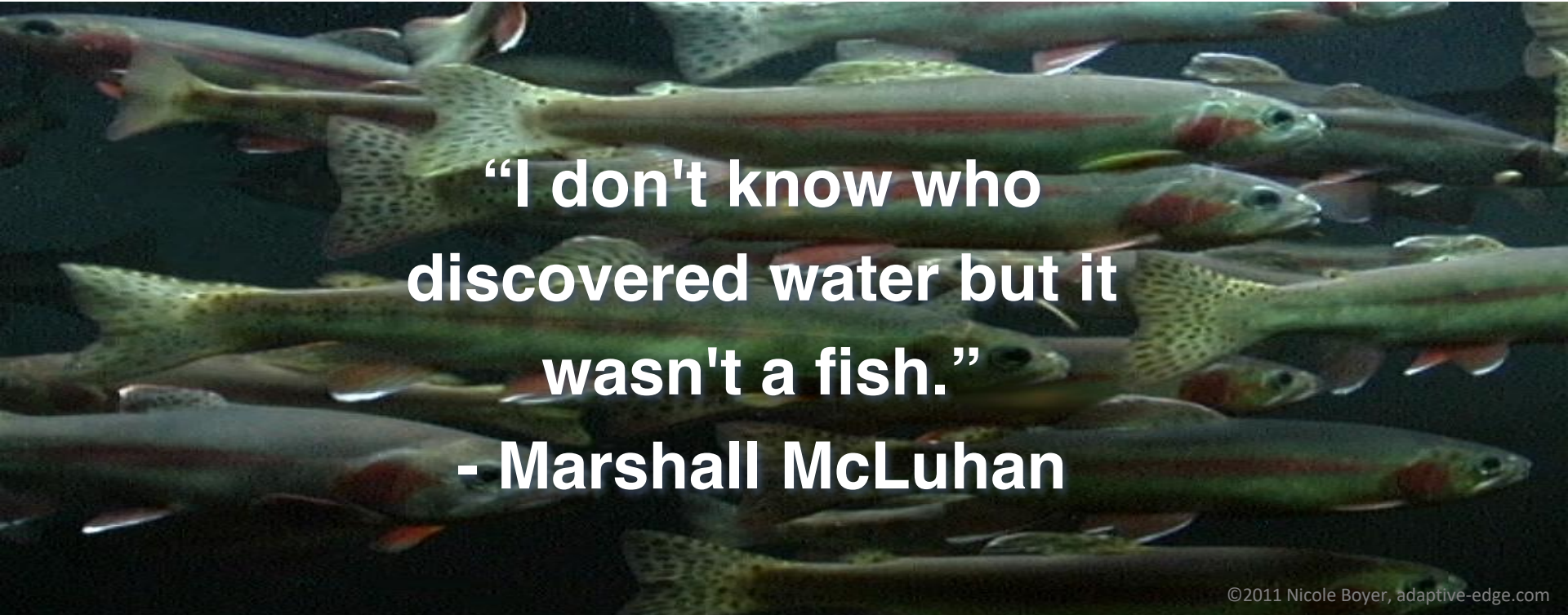
Complex

Ambiguous

"the new
normal"

Scenario Planning: Why use it?

2. **An innovative thinking** tool to help see new possibilities and to unlearn overcoming outdated ideas about the future

A large school of rainbow trout swimming in dark water. The fish are silvery with a prominent red stripe along their sides and dark spots on their backs. They are moving in a coordinated fashion, filling the frame.

**“I don't know who
discovered water but it
wasn't a fish.”**

- Marshall McLuhan

Scenario Planning: Why use it?

3. Collaboration tool for diverse groups to think and act together around “stuck” future challenges

-> A form of *participatory foresight*



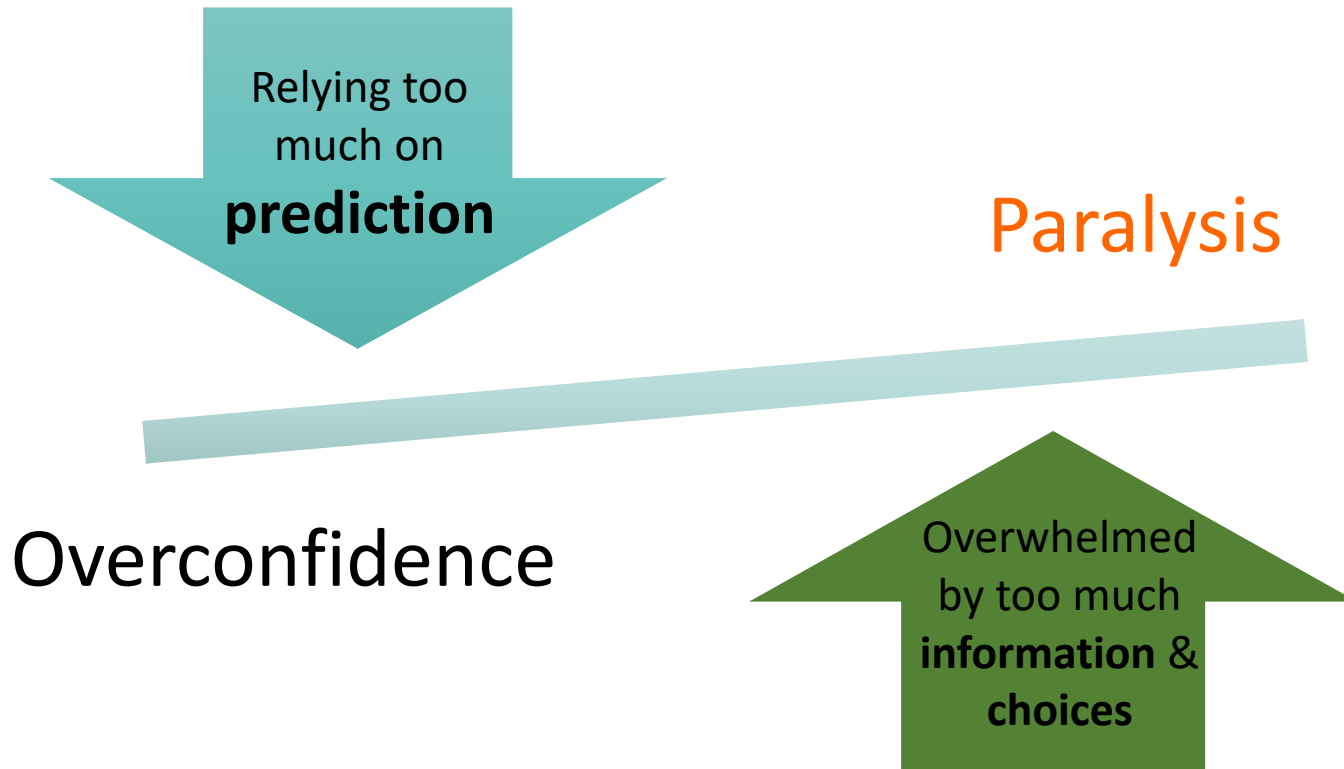
“Change is
disturbing when it
is done to us,
exhilarating when
it is done by us.”

Elizabeth Roth Kantor

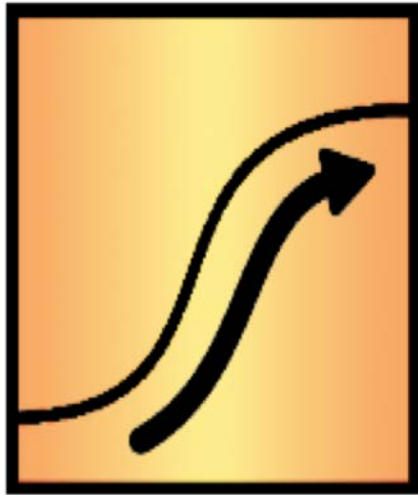
In Sum: Scenarios...

ARE	ARE NOT
<ul style="list-style-type: none">• Multiple possible futures• Hypotheses• Stories• Designed to shift our thinking• Customized to context	<ul style="list-style-type: none">• Single futures• Predictions• Plans• Designed to reinforce certainty• “Off the shelf”

Scenario planning navigates a balance

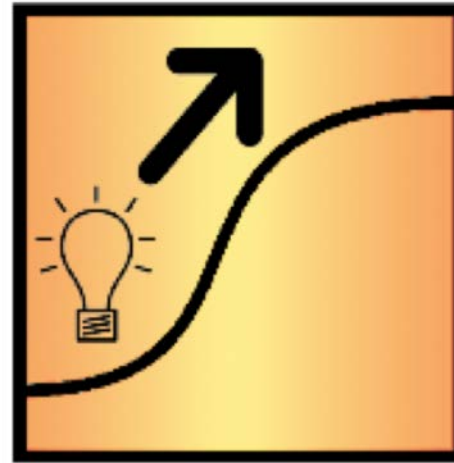


A Tool for Planning & Collaboration: Scenario Planning Helps Us do BOTH



Adapt to the future

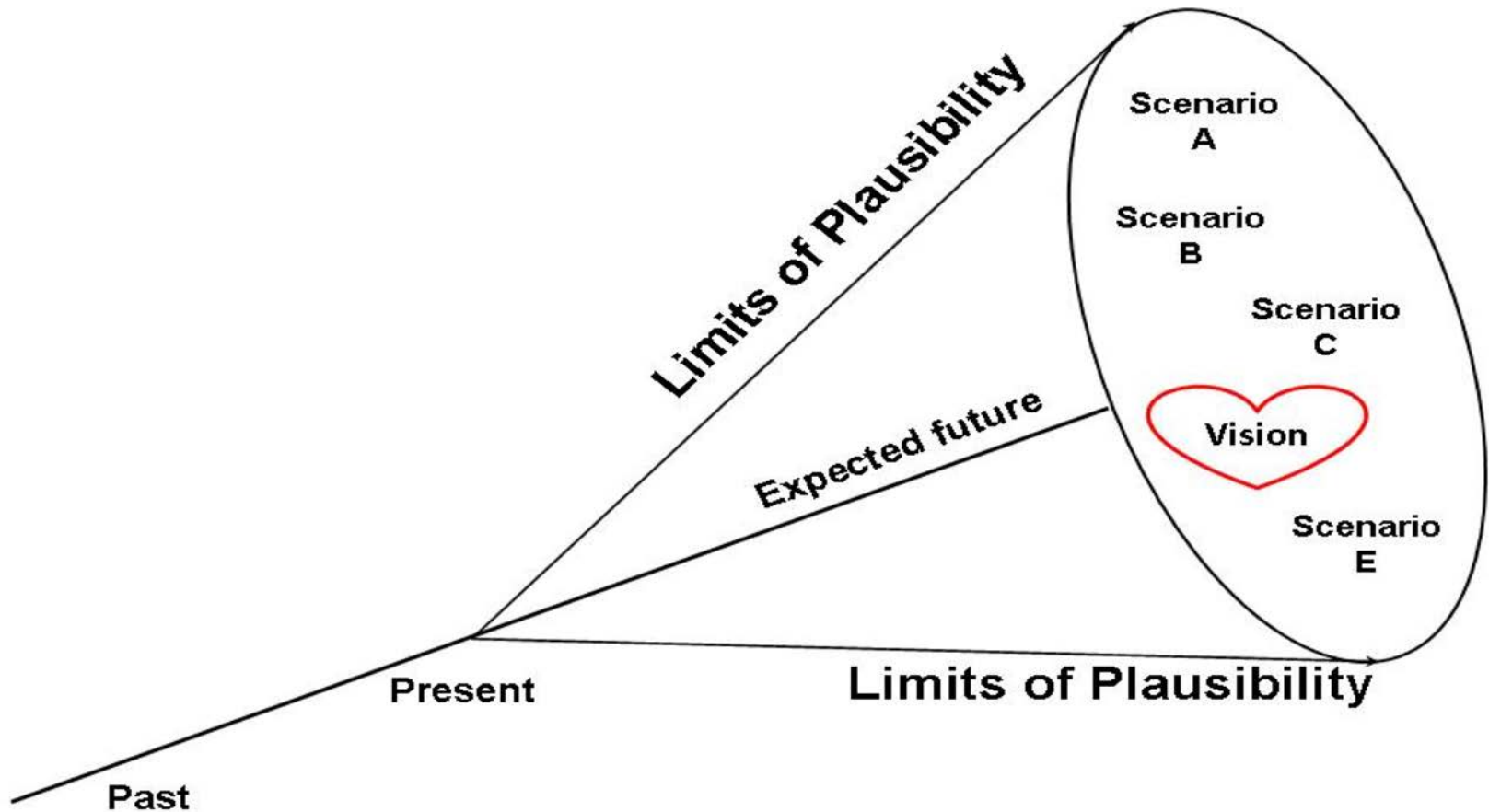
- Analytical Skills
- Strategic Risk Frame
- About **anticipating & adapting**



Shape the Future

- Imaginative Skills
- Possibility Frame
- About **co-creating new realities**

Balancing adaptive & normative stances

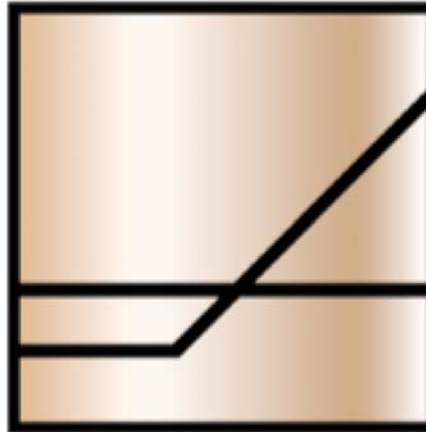


From Scenarios to “Backcasting” the Vision

Scenario	Value
1.	+
2.	+
3.	+
4.	+

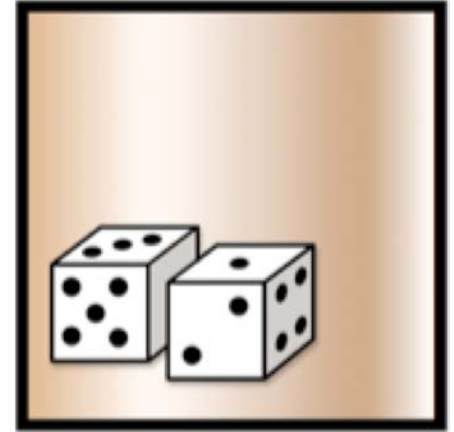
No-regrets moves

Strategic decisions that have positive payoffs in any scenario.



Options

Decisions that yield a significant positive payoff in some outcomes & a [small] negative effect in others.



Big Bets

Focused strategies with positive payoffs in one or more scenarios but a negative effect in others.

“There are two main purposes of scenarios: one is to avoid regret; the other is positive and creative – to see new strategic options that you were previously not aware of.”

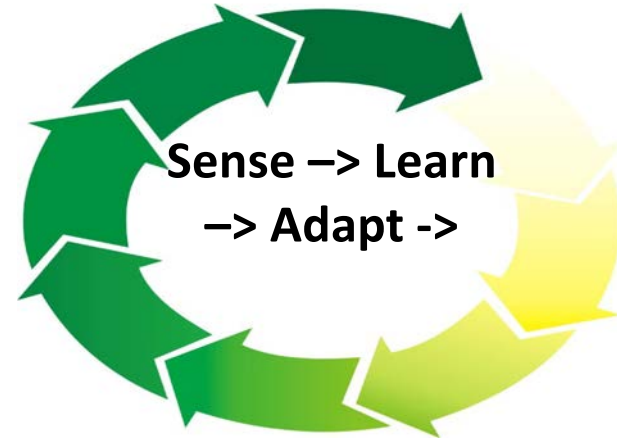
-**Pierre Wack**, one of the pioneers of scenario thinking at Royal Dutch Shell

Changing Planning Paradigm



Plan -> Predict -> Control

- Linear
- Static
- About the “Plan”
- About prediction
- About answers & experts



- Dynamic
- About the “strategic conversation”
- About managing uncertainty
- About collaboration and continuous learning

Learning for the future

“Adaptive learning is the ultimate aim of scenario work because it signals an organization [or group] that learns and changes from its own experience to navigate a constantly changing context.”

- Chermack (2015: 85)



What Did We Learn?



What Did We Learn?

- Drivers of Change
- The Four Future Scenarios
- Strategic Implications

Drivers of Change

Learning About Possible Changes

- 'Co-Learning' Events
 - Future of Mobility
 - Future of Work
 - 'Tensions of Change' in an SF neighborhood
- Two Futures Task Force Workshops
 - Scenario-Building
 - Strategic Implications



Drivers of Change

ConnectSF Givens	ConnectSF Uncertainties
<ul style="list-style-type: none">• Climate change, resource scarcity, and natural disasters• Demographics• Earthquake risk• Aging infrastructure• Public distrust in government• Rapid technological change	<ul style="list-style-type: none">• Regional Economy• 21st Century Infrastructure• Changing Mobility Landscape• Public Health Influences• Lifestyle Choices and Values• San Francisco's Adaptive Capacity• <i>Inequality and Polarization</i>• <i>Governance</i>

Key Drivers of Change, as Axes

Defining the Range of Uncertainty

Low

High

Small role
for gov't

Low gov't
funding

SOCIAL - POLITICAL WILL

Large role
for gov't

High gov't
funding

Resources,
wealth
concentrated

SF residents
mostly upper-
income

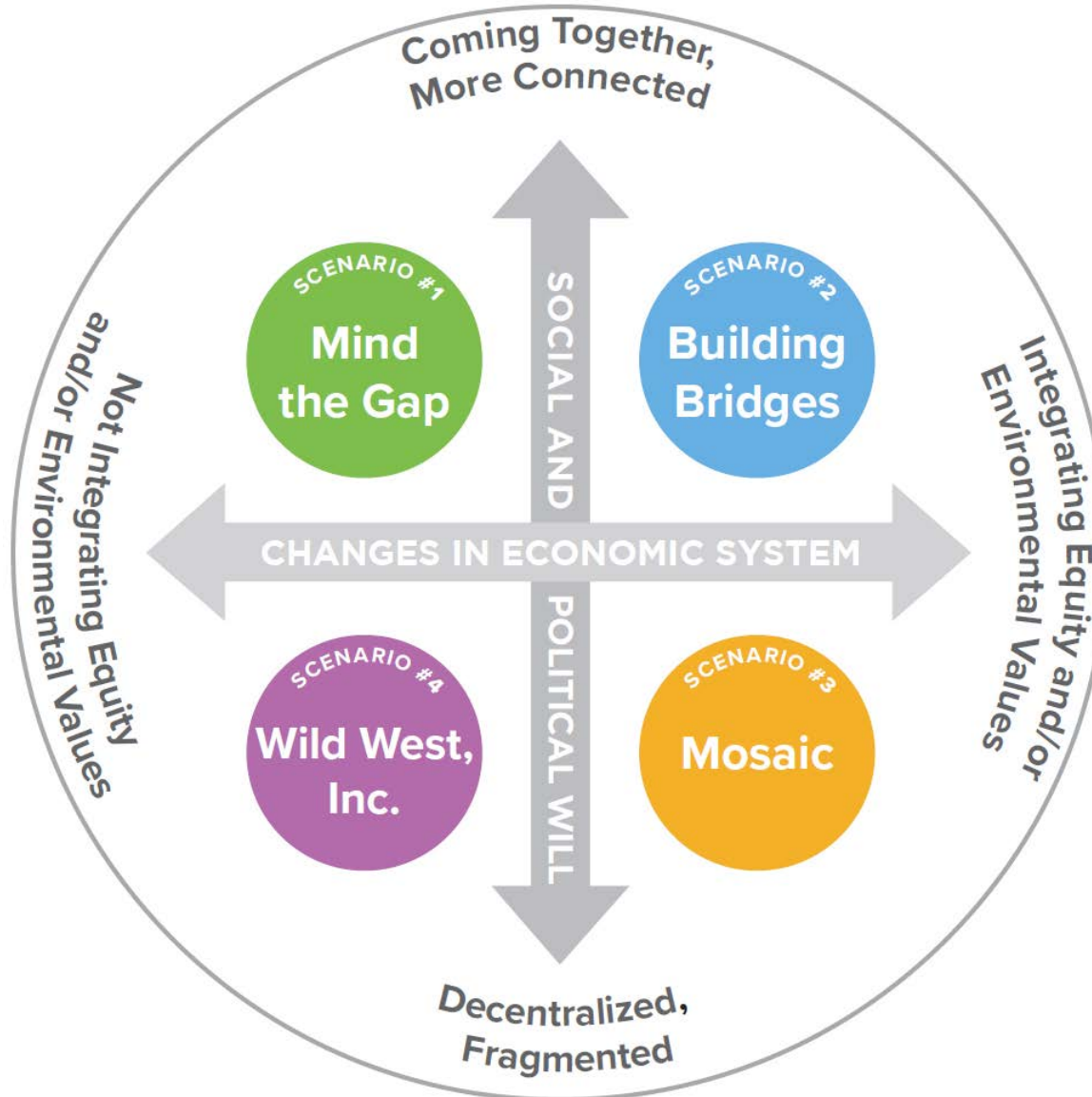
ECONOMIC EQUITY/SYSTEM

Resources
distributed
widely

SF residents
socio-
economically
diverse

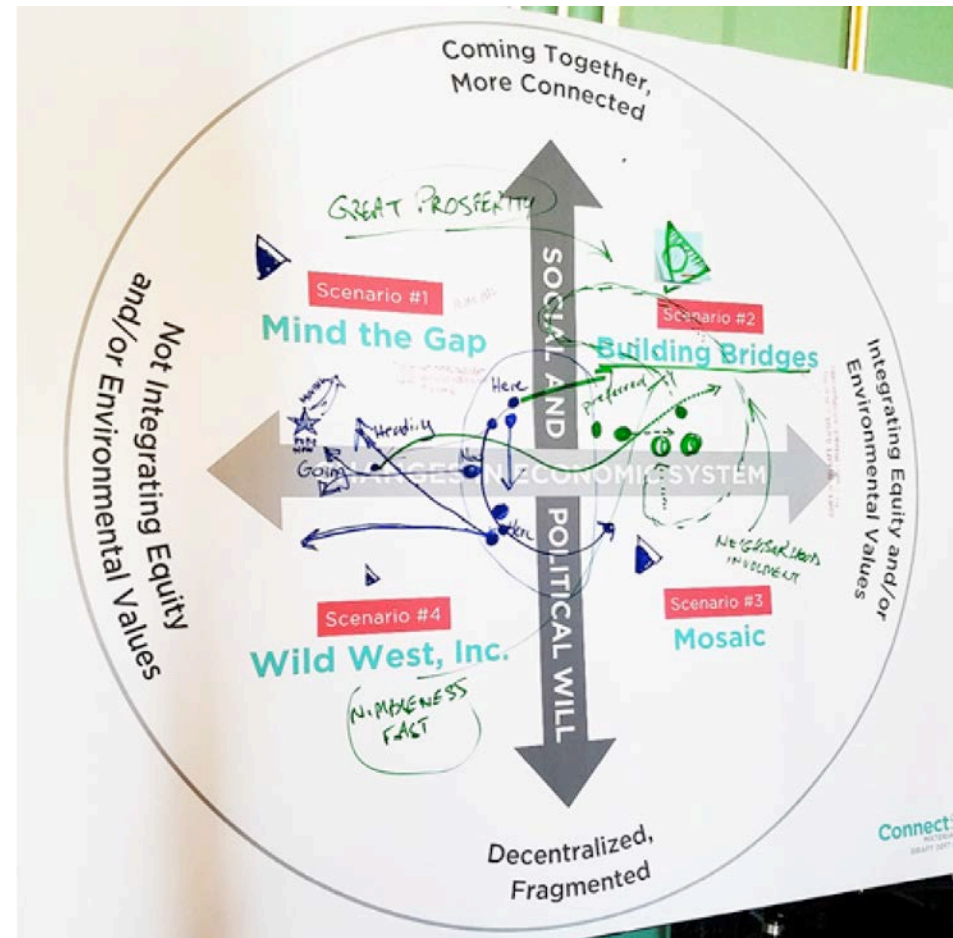
ConnectSF Scenario Matrix

4 quadrants = 4 possible futures



Strategic Implications

- Which scenarios are desirable, undesirable?
- How to avoid undesirable scenario(s)?
- How to move toward desirable scenario(s)?
 - Civic engagement
 - Governmental structure, capacity
 - Regulations and policy
 - Transportation funding
 - Transportation innovation
 - Transportation networks and built environment
- Capacity-building



Implications: Some Performance Metrics

	SAN FRANCISCO TODAY	SCENARIO 1 MIND THE GAP 2065	SCENARIO 2 BUILDING BRIDGES 2065	SCENARIO 3 MOSAIC 2065	SCENARIO 4 WILD WEST, INC 2065
 POPULATION <small>U.S. Census, 2016</small>	870,000	+10% More people	+60% More people	-10% Less people	+40% More people
 RACIAL AND ETHNIC DIVERSITY <small>2015 Five Year American Community Survey</small>	51% People of color	↓↓↓ Less diverse	↑ More diverse	↑↑ More diverse	↓↓↓ Less diverse
 MEDIAN HOUSEHOLD INCOME <small>U.S. Census, 2016</small>	\$81,000	↑↑↑↑ Higher median income	↑↑↑ Higher median income	↓↓ Lower median income	↓ Lower median income
 JOBS <small>SF Planning Commerce & Industry Inventory, 2014</small>	610,000	+50% More jobs	+70% More jobs	-30% Less jobs	+40% More jobs
 MODE SPLIT <small>San Francisco Performance Scorecard, FY 2016</small>	30% Of trips are in an SOV (single-occupancy vehicle)	-20% Lower SOV trip rate	-70% Lower SOV trip rate	0% No change	+30% Higher SOV trip rate
 CONGESTION <small>MTC Vital Signs 2016</small>	8.6% Of vehicle-miles are in congestion	↑↑↑ More congestion	↑↑ More congestion	↓↓ Less congestion	↑↑↑↑ More congestion
 EQUITY OF ACCESS <small>PBA Equity Analysis report, 2013</small>	23 Min. Commute from low-income areas is similar to average commute.	↑↑↑ Longer commute from low-income areas	No change	↑ Longer commute from low-income areas	↑ Longer commute from low-income areas
 TAXES <small>SF property taxes 2015-16, divided by number of residents</small>	~\$2,000	↑↑↑↑ Higher taxes	↑↑↑ Higher taxes	↓↓ Lower taxes	↓ Lower taxes

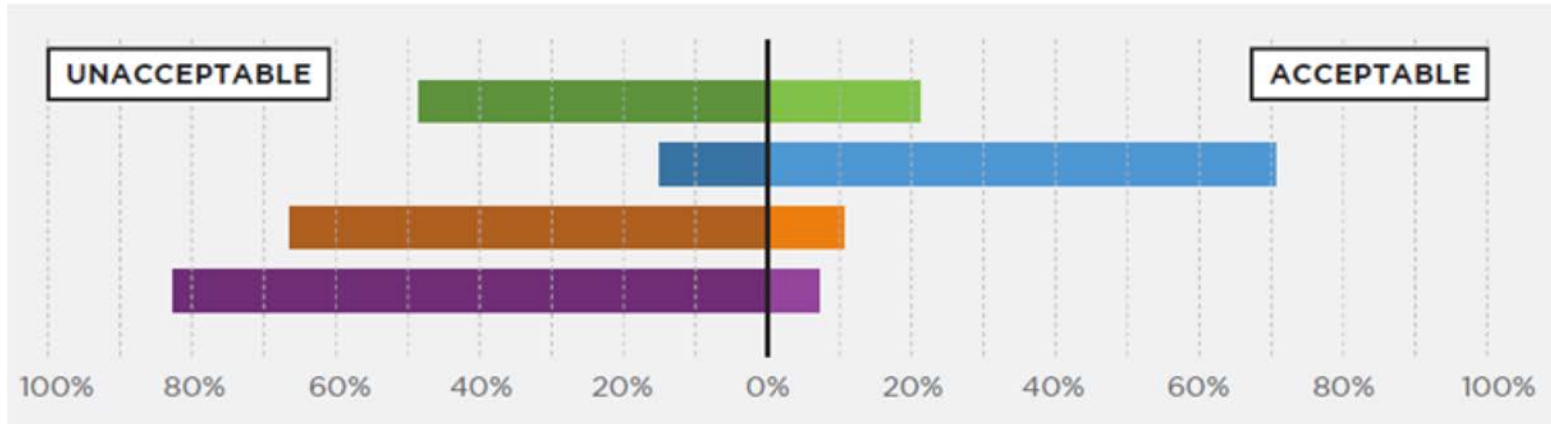
This information is for illustrative purposes for ConnectSF and no other city projects or programs. It is not a forecast.

Outreach Feedback

Do you think this scenario is acceptable or unacceptable?

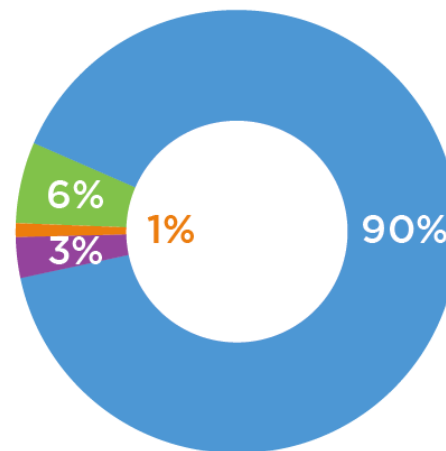


SURVEYS



FOCUS GROUPS

What scenario did people most prefer for the future of San Francisco?



Scenarios:

Mind the Gap

Building Bridges

Mosaic

Wild West, Inc.

Reaching 'Building Bridges'

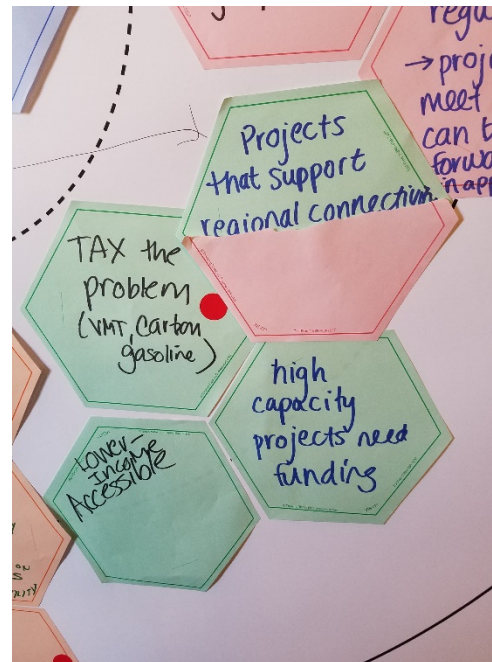
What Is Needed?

- Visionary leadership
- Equity considered at all stages of planning
- Citizen participation and civic engagement
- Regional thinking and coordination
- Political willpower
- Expanding access to emerging mobility services



SUMMARY TABLE

Who	Start	Stop	Continue
City	Serious, collaboration among transportation agencies	holding efforts to build up subsidizing disabled transportation or other transportation for low-income households	reclaiming open space for public space for public space for public space for public
Envision Transportation Agency	regional hubs increasing transit cheap ride share programs look at congestion pricing, impact transit restrict autos in urban	transportation for low-income households	Active ways to get around transportation transportation
NGO / Business Community	Building housing in office space	transportation for low-income households	after school programs to transportation for low-income households
Art / Public	Exclude public art in urban Transit housing as a right Low / Family community Exclude one another Public space as not appropriate	Shut in public art in urban transportation for low-income households	transportation for low-income households



An aerial photograph of San Francisco, California, featuring the city's dense urban landscape and the San Francisco skyline. The image is overlaid with a semi-transparent teal color. The text "Theory, Practice, Challenges, and Breakthroughs" is centered in a white, serif font.

Theory, Practice, Challenges, and Breakthroughs

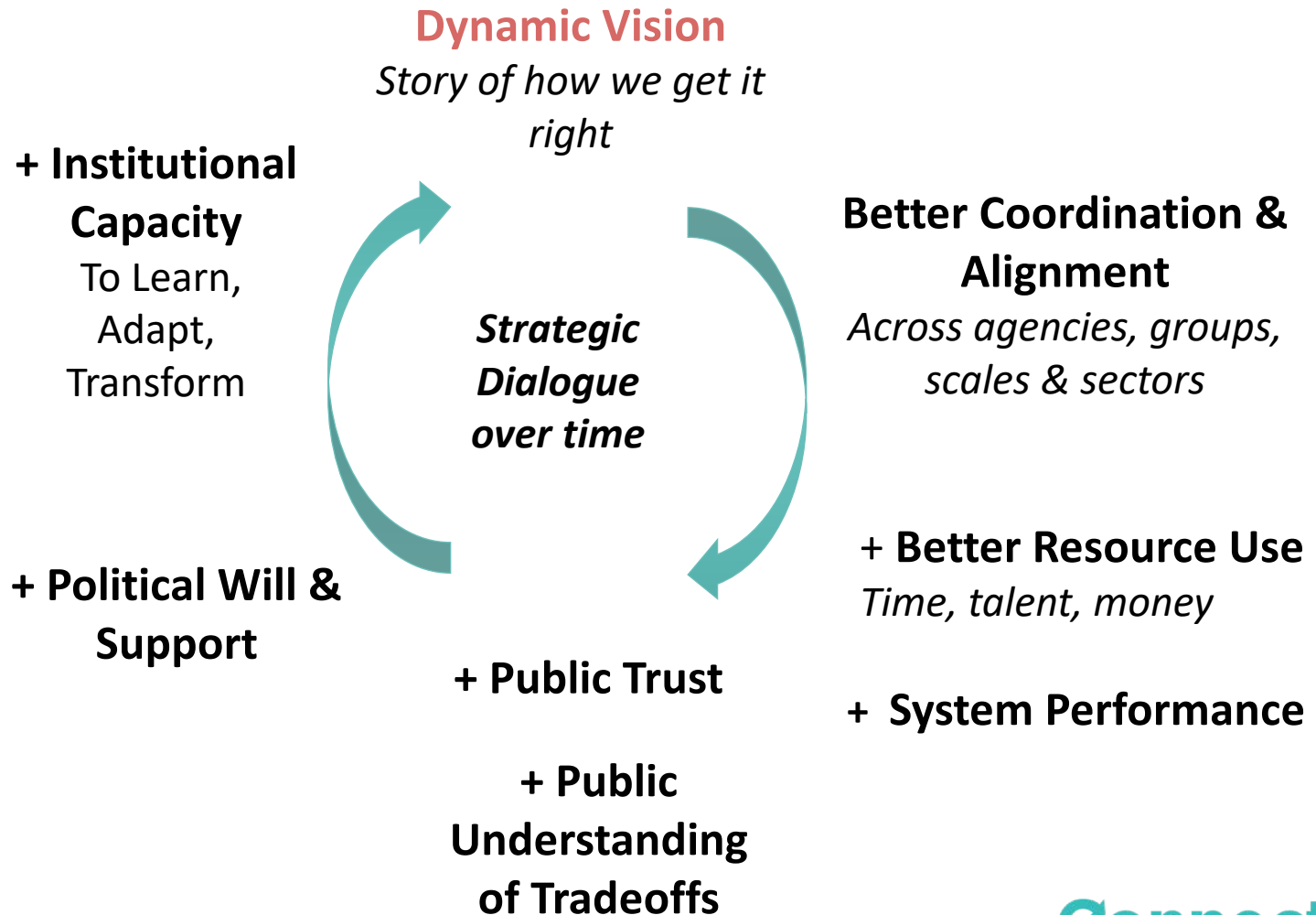
Connect SF: Desired Outcomes

From Director's Interviews April 2016

1. **New Capacities for Shared Decision-Making & Action** that significantly improves SF's ability to do effective, cutting-edge planning, benefiting people in the city in the short and longer-term
1. **Greater Public Engagement & Understanding** regarding future transportation choices and investments. This includes adding new voices, not just "the usual suspects."
2. **Greater Political Engagement & Support** across key stakeholders for a robust transportation vision, key choices, and on-going planning for the shorter and longer-term.

What is ConnectSF Solving for?

Creating 'virtuous circles'



What happened in practice?

Act 1: Resistance to project by leadership (and others)

- “The 9 Lives of ConnectSF”
- Key Barriers: a) political b) governance c) linear mental models of planners d) low trust e) disbelief in change



What happened in practice?

- **Act 2:** But the project **wouldn't die!**
 - Because the perceived need was great AND emerging leaders stepped in
- **Act 3:** Successful workshops energized the system -> perceived to be an “innovative engagement experience” for most Future Task Force members
- **Act 4:** *Where we are now* -> Circling back to Scenarios, Institutionalizing Learning and Social capital built

Why does this work when other methods fail?



Why does this work when other methods fail?

- It's **story-based**
 - Stories of the future (and present) travel easily; powerful tools for transmitting complex tradeoffs, and mobilizing collective action over time
- It's a systems thinking tool identifying **key levers of change** and depolarizes thinking (*"it's the system not you as person"*)
- It's a **participatory shared learning process** that can transform people's sense of agency and responsibility
- It's an indirect method allowing multiple agendas to coexist
 - **Consensus** is not required for future movement to occur

“Stories are tools for knowing and judging. Change the stories, you change the way we live.”

An aerial photograph of San Francisco, California, showing the city's dense urban landscape. The image is overlaid with a semi-transparent teal color. The text "Possibilities for Other Planning Projects" is centered in a white, serif font. The background shows the city's grid pattern, with numerous buildings and streets. The San Francisco skyline is visible in the distance, including the Transamerica Pyramid. The water of the San Francisco Bay is visible on the left side of the image.

Possibilities for Other Planning Projects

Bringing Scenario Planning Principles to Other Planning Projects

- A structured way to think about alternative futures, beyond just extrapolating
 - Example: AVs will make most street-based transit services obsolete. How can we help transportation agencies consider such a future?
- Typical planning:
 - One future, one set of assumptions, one set of projections
- Scenario planning is about multiple possible futures
 - Less important to get to high confidence in one estimate of future performance
 - More important to ‘test’ projects and plans in multiple scenarios
 - Example: Road pricing

An aerial photograph of San Francisco, California, showing the city's dense urban landscape. The image is overlaid with a semi-transparent teal color. The text "What's Next for ConnectSF?" is prominently displayed in the upper left quadrant in a white, serif font. The background shows the city's grid pattern, with numerous buildings and streets visible. The San Francisco skyline, including the Transamerica Pyramid, is visible in the distance. The overall tone is professional and forward-looking.

What's Next for ConnectSF?

The Vision



Equity



**Economic
Vitality**



**Environmental
Sustainability**



**Safety and
Livability**



**Accountability and
Engagement**



Process Findings

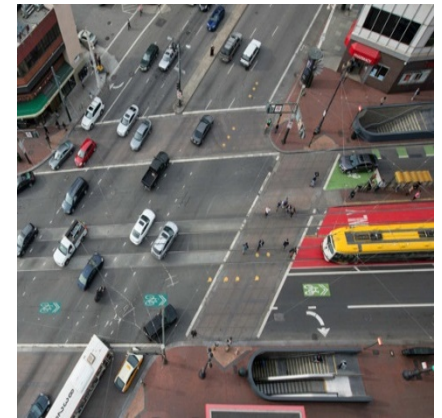
- 1) Scenario planning is a strong tool...
- 2) But is difficult to use with “standard transport planning”
- 3) The public wants to know the City is struggling with uncertainty – they are too!

Recommendations

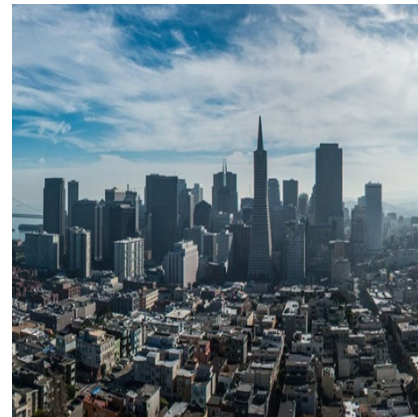
- 1) Educate with planning assumptions
- 2) Be open to what you discover
- 3) Build adaptive frameworks with your partners



Transit Corridors Study



Streets & Freeways Study



Countywide Transportation Plan



Transportation Element Update

Thank you

doug.johnson@sfgov.org

ConnectSF