Connect the Whole Community:
Leadership Gaps Drive the Digital Divide and Fuel Disaster and Social Vulnerabilities

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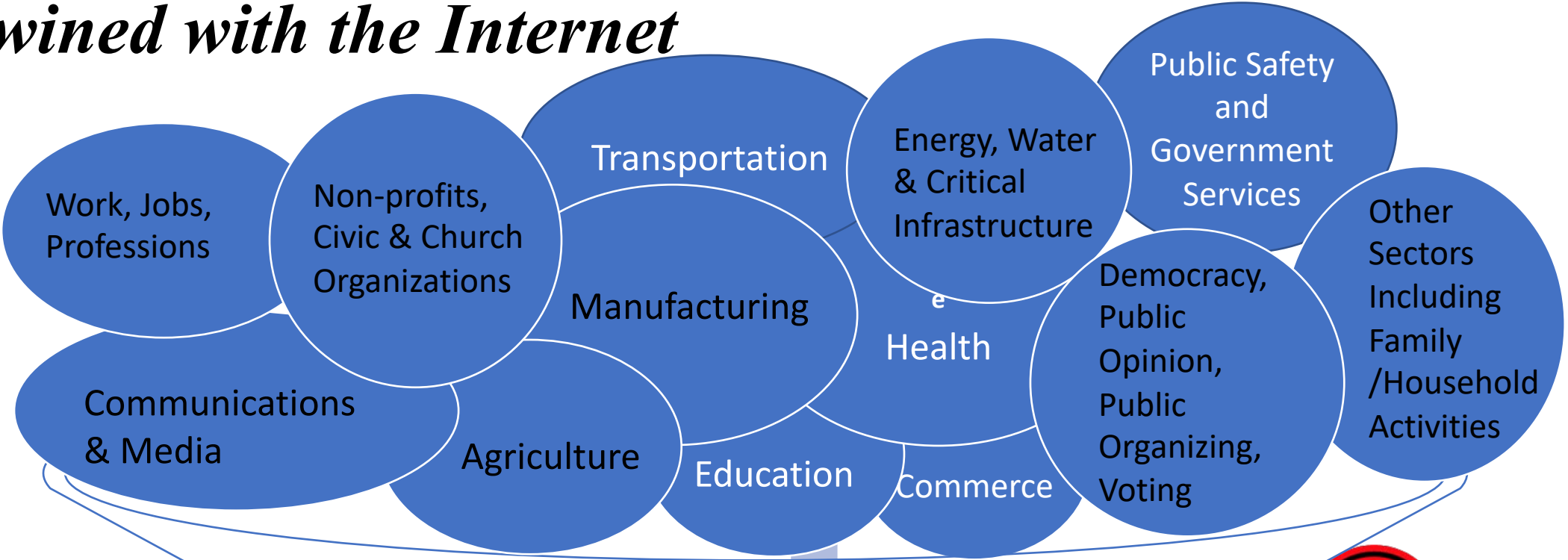
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Patrick Lanthier

Rivera/Lanthier & Associates

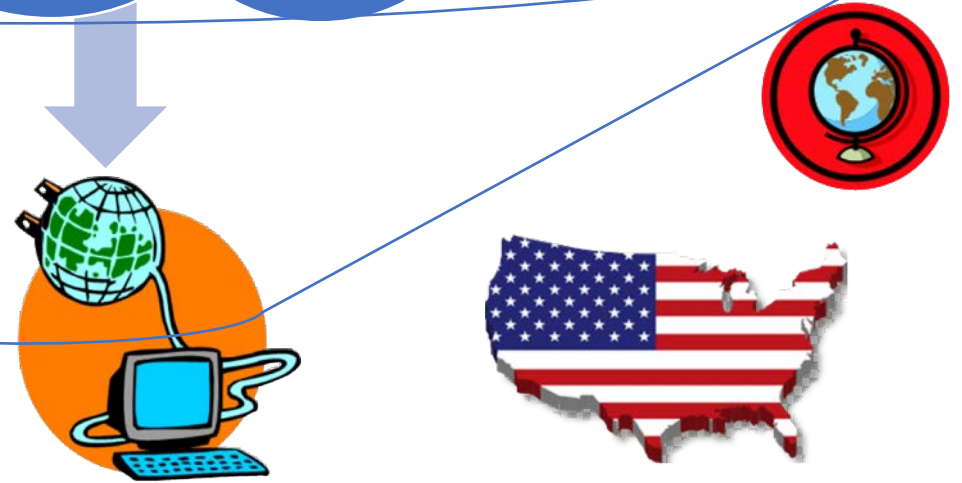# The "Whole Community" Approach to Disaster and Infrastructure Planning

- The Whole Community Approach to Disaster Planning and Relief Espoused by the United Nations and the Federal Emergency Management Agency
- Must address the needs of the *Whole Community* in Disaster Planning, Relief, and Work to Bound Community Resilience

- **Communications as Aid**

- **Ask**: Who's at the planning table?

- *The Digital Divide Undermines Disaster Planning and Response*
- Digital inclusion strategies must be a centerpiece *of community-centered infrastructure planning, investment, regulation and disaster relief*.

The Imperative of Connecting the Whole Community: Sectors of the U.S. and International Economy and Society Intertwined with the Internet

Work, Jobs, Professions

Non-profits, Civic & Church Organizations

Transportation

Energy, Water & Critical Infrastructure

Public Safety and Government Services

Other Sectors Including Family /Household Activities

Communications & Media

Manufacturing

e Health

Democracy, Public Opinion, Public Organizing, Voting

Agriculture

Education

Commerce

Increasing Integration of the Internet into the Economy, Democracy, and Society

Graphic by Professor Catherine Sandoval ©

Connect the Whole Community: Risks of Network Exclusion

- The shift of education, work, healthcare, social services, business, and many other functions to the Internet during the COVID-19 pandemic declared in March 2020 (World Health Organization (WHO) 2020), underscores the imperative of universal Internet access.

- As communities, families, and individuals face a confluence of hazards—the COVID-19 pandemic, wildfires, utility-induced power shut-offs to forestall fires triggered by electric facilities, poverty, and racism—those unconnected or under-connected to the Internet "are not only at a distinct disadvantage for educational and economic opportunities, but their very public safety also is at risk because they are not online" (**CETF**, 2020, p. 1).

- As the Internet's integration into society increases, collective costs of digital exclusion escalate.

- Adoption or access gaps affect the Whole Community, not just the person or family unconnected or underconnected to the Internet or without network access.

- As the Internet's integration into society increases, the digital divide diminishes access to societal resources including disaster aid, and exacerbates wildfire, flood, pandemic, and other risks.

*Government and Regulatory Construction of Vulnerability as Climate Change Erodes Regulatory Assumptions

* The American Digital Divide is manifest in Urban areas, Many Suburban areas, in Rural areas, & on Native American Reservations

*Our book chapter examined the digital divide through case studies of the 2017 San Jose flood triggered by the Anderson dam's overtopping that flooded low-income and many digitally disconnected neighborhoods, and communications failures during the 2018 wildfire in Paradise, California.

When those excluded from communications networks live in a dam's flood plain, high wildfire danger zone, or other vulnerable area, community vulnerability increases along with disaster response challenges.

Regulatory decisions construct the digital divide, social, and disaster vulnerability

LEADERSHIP

Regulatory Decisions Construct Social Vulnerability including Placed-based Vulnerability

*The Digital Divide is not just about Demography or Geography

Don't Assume the network. Create and support robust networks!

*Need Backhaul, middle mile, robust central offices & interconnection access

*Government Decisions about Where to Build Networks, Interconnection, Network Governance, Affordability, and Training Construct the Digital Divide and Social and Disaster Vulnerability

Fiber is Needed to Support the Modern Polity, Contemporary and Future Economy

Connect the Whole Community: Bridging the Digital Divide

- Bridging the Digital Divide is Critical to our Democracy, Economy, Education, Health
- Don't serve the "**Imagined Community**" Assumed to Have Internet Access. We need to serve the Whole Community!
- *Making People be "Internet Migrants" is Not Sufficient*
- *Internet access in parking lots and at school buildings or libraries (when open) is not sufficient for our contemporary education, economic and health access, and our democracy*
- **Robust Internet Access @ Home Is Crucial!**

- Network Access is the Foundation

- Need Speeds Sufficient for Modern Internet use Including Video Conferencing

- Need Policies that Protect Open and Robust Internet Use. (Don't throttle people who use Internet commensurate with work and school use)

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LEADERSHIP,!
LEADERSHIP!

Sunne Wright McPeak, CETF Executive Director, Sunne's call to action at every CETF meeting and Digital Divide Forum

Strategies to Increase Service Action, Action, Action!

*Network Deployment Strategies

*Interconnected Infrastructures:

*Telecom, Energy & Water

*Dig Once Policies: Coordinate with transportation investments

*Permitting Process Improvement

Promote:

Access

Affordability

Adoption

Training

Connect the Whole Community!