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Leveraging the Sharing Economy to Expand Shelter and Transportation Resources in California Evacuations

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Issue

In 2017 and 2018, California was severely impacted by a number of devastating wildfires that required thousands of people to evacuate. These evacuations were hampered by poor communication, traffic congestion, and transportation and shelter resource deficiencies. To ensure that all citizens have both transportation and shelter in evacuations, agencies must consider alternative strategies for expanding resources, such as leveraging the sharing economy.

Key Research Findings

To understand the possibility of leveraging the sharing economy to provide housing and transportation in an evacuation, researchers at the Transportation Sustainability Research Center (TSRC) at University of California, Berkeley, distributed an online survey (n=226) from March to July 2018 to individuals impacted by the 2017 December Southern

California wildfires (i.e., the Thomas Fire, Creek Fire, and Skirball Fire) and also collected information on the actions of sharing economy companies in recent California wildfires in 2017 and 2018. Main research findings are presented in this brief with the full report available at: <https://www.ucits.org/research-project/shaheen-ucb-sharing-economy-evacuation/>.

Private sharing economy companies have taken actions to assist residents affected by California wildfires. The sharing economy represents a collection of Internet-based transactions where goods and services are shared. Since Hurricane Sandy in 2012, several large sharing economy companies have been active in disaster response and relief in various U.S. disasters [1]. For recent California disasters, three primary sharing economy companies - Uber, Lyft, and Airbnb - have focused on disaster relief largely after the wildfire evacuations (Table 1).

Table 1: Actions Taken by Sharing Economy Companies in Response to Major California Wildfires in 2017 and 2018

	Northern California Wildfires	Southern California Wildfires	Mendocino Complex Wildfire	Carr Wildfire	Camp Wildfire	Woolsey Wildfire
Month/Year	Oct. 2017	Dec. 2017	July 2018	July 2018	Nov. 2018	Nov. 2018
Primary Impact Area	Sonoma, Napa, Solano, and Mendocino Counties	Los Angeles, Ventura, and Santa Barbara Counties	Lake and Mendocino Counties	Shasta and Trinity Counties	Butte County	Ventura and Los Angeles Counties
Evacuation (# of people)	~100,000	~200,000	~15,000	~40,000	~50,000	~200,000
Actions by Lyft	Offered five rides up to \$15 each to and from evacuation centers and also offered free rides to and from hospitals	Offered free rides up to \$40 to and from evacuation centers and partnered with United Way and activated its "Round Up and Donate" program*	No action taken	Offered free rides to seniors and volunteers through its "Relief Rides Program,"** partnering with United Way and American Red Cross	Partnered with United Way and offered two free rides up to \$15 in the Chico area	Partnered with United Way and offered two free rides up to \$15 in Southern California
Actions by Uber	Partnered with the American Red Cross and provided rides to and from evacuation centers and filtered air centers, giving \$300,000 worth of rides, food, and relief	Offered free rides up to \$50 to and from evacuation centers and provided free meals to first responders	No action taken	No action taken	No action taken	Offered two free rides up to \$50 to and from evacuation centers
Actions by Airbnb	Activated the "Disaster Response Program" and over 900 hosts offered free housing	Activated the new "Open Homes Program"*** with free housing to evacuees	Activated "Open Homes Program"	Activated "Open Homes Program"	Activated "Open Homes Program" (2,000+ hosts offered housing)	Activated "Open Homes Program" (1,600+ hosts offered housing)

* Program that allows Lyft users to round up the cost of their trip to the nearest dollar and donate the money toward a charity

** Now rebranded to "Wheels for All"

*** Rebranding of the Disaster Response Program to include refugee housing

A moderate number of private citizens are willing to share their own resources, especially transportation, in a future evacuation. Individuals affected by the Southern California wildfires in 2017 were asked about their willingness to share resources in a future evacuation, specifically their interest in sharing transportation and sheltering resources (see Figure 1).

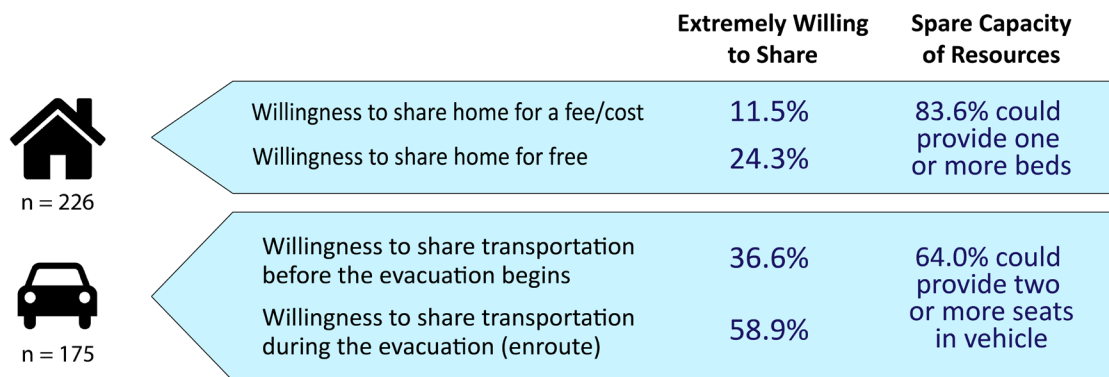


Figure 1: Citizen Willingness to Share Resources in Future Evacuation

Policy Considerations

At the local level, agencies should consider:

- Building working relationships with sharing economy companies and community organizations that provide transportation or housing
- Working with neighborhood associations to develop community-based plans to ensure transportation for neighbors
- Including sharing economy companies in training exercises and roundtables for response and relief
- Amending current evacuation plans (e.g., ESF 1 - Transportation Functional Annex) to add private companies as resource partners and designate the appropriate communication flow

At the state level, disaster relief policy should consider:

- Amending the California Office of Emergency Services Emergency Plan to require disaster councils to add a multi-hazard evacuation plan with clearly outlined transportation assets (public and private) as a part of an Emergency Operations Plan
- Including sharing economy companies in the Business Operations Center pursuant of SB 546 (Disaster Public-Private Partnerships Act of 2006)
- Requiring disaster councils to identify all available resources, whether public or private, for vulnerable groups to meet the requirement of AB 2311 (Emergency Services: Access and Functional Needs in Emergencies Act of 2016), which requires cities and counties to integrate access and functional needs into emergency plans upon the next update

Further Reading

This policy brief is drawn from the research report “Current State of the Sharing Economy and Evacuations: Lessons from California,” prepared by Stephen Wong and Susan Shaheen with the [Transportation Sustainability Research Center \(TSRC\)](#) affiliated with the [Institute of Transportation Studies at the University of California, Berkeley](#). The report and this policy brief can be found at: <https://www.ucits.org/research-project/shaheen-ucb-sharing-economy-evacuation>.

[1] Wong, S., Walker, J., & Shaheen, S. (2018). *Bridging Troubled Water: Evacuations and the Sharing Economy*. Presented at the Transportation Research Board 97th Annual Meeting Transportation Research Board.

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