

G.B. MEETING 5/8/19 Agenda Item C-5a
EXCERPT: Pages 15, 23, 24

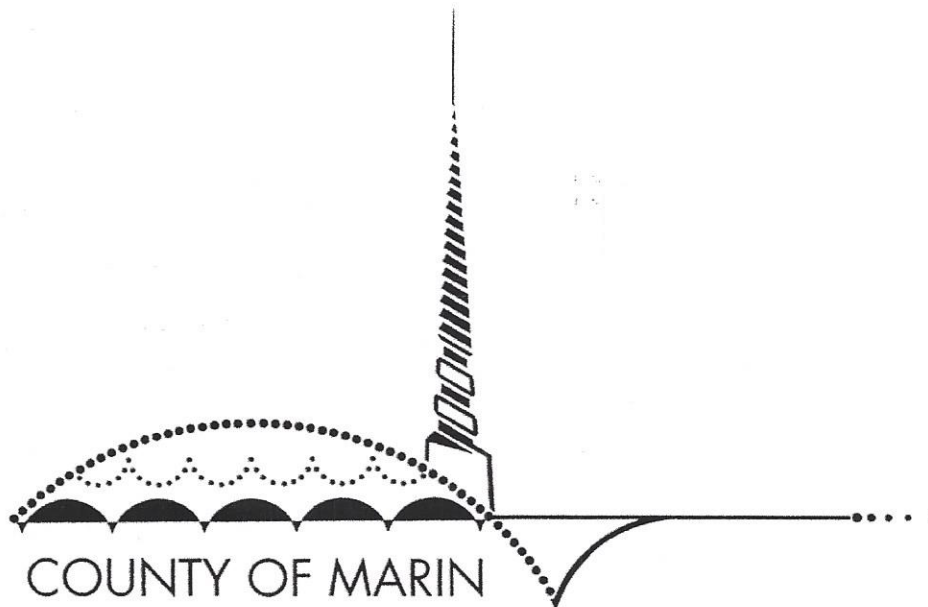
2018-2019 MARIN COUNTY CIVIL GRAND JURY

Wildfire Preparedness

A New Approach

Report Date: April 18, 2019

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A major national report by the Transportation Research Board of the National Academies found that transit should be involved in both planning and implementation procedures of an emergency evacuation. It specified that “transit agencies should be part of preparedness plans and represented in the emergency command structure. They can also play a vital role during the response phase, in both helping to evacuate those without access to a private vehicle and bringing emergency responders and equipment to the incident site.”¹²

Additionally, other emergency transportation preparedness studies reviewed by the Grand Jury make it clear that for an orderly evacuation, large populations cannot be moved without transit being fully represented in the chain of command in an emergency operations center (EOC).^{13 14} In Marin’s EOC, transit is only represented by Marin Transit. Golden Gate Transit emergency managers, SMART representatives, Whistlestop, Marin Airporter and ferry operators do not have a seat in the room. The current arrangement is that Marin Transit will keep Golden Gate Transit and the other transit agencies informed and on standby. This places most transit agencies too far from the emergency command structure in the operations center and will lead to unnecessary delays as information has to be relayed to and from these other agencies before any assets can be deployed.

These emergency transportation studies indicate that an evacuation using public transit requires real-time communication between transit operators and emergency managers prior to and during emergency evacuations. This entails integration of communications within a transit system, among different transit agencies and between transit and other governmental safety partners. Currently, Marin’s transit communications fail to meet these standards.

Transit communications are not properly integrated into the Marin Emergency Radio Authority (MERA), a multi-agency communications system. In 2014, a special parcel tax was passed to fund MERA’s Next Generation radio equipment, a system that was intended to improve its interoperability and integrate emergency communications services into a unified system. Despite this, units in the field of both Golden Gate Transit and Marin Transit still cannot communicate directly with each other, with other transit agencies or with other mutual aid safety partners and first responders to coordinate emergency activities because the new equipment has not yet been installed. It is expected that the new system will be up and running by 2023. This failure impedes the county’s ability to deploy transit services and help evacuate large populations in an emergency.

Judged on both criteria of integration with the command structure and fully integrated communications, transit is an underused resource of evacuation preparedness in Marin.

¹² *The Role of Transit in Emergency Evacuation*. Transportation Research Board of the National Academies Special Report 294, *Transportation Research Board* 2008. p.3.

¹³ Schwarz, Michael A. and Litman, Todd A. “Evacuation Station: The use of Public Transportation in Emergency Management Planning.” *ITE Journal on the Web*. Jan. 2008.

¹⁴ Scanlon, J. “Transportation In Emergencies: An Often Neglected Story.” *Disaster Prevention and Management*. Vol. 12, No. 5 2003.

FINDINGS — Alerts

- F11. Any hesitation to use the WEA system can be deadly even if its alerts might reach people outside of its intended target zone.
- F12. Alert Marin sends the most accurately targeted warnings to endangered populations, but it reaches too few residents because it is not well publicized. Both Alert Marin and Nixle require opt-in registration, a serious design flaw.
- F13. Sirens could be a useful and reliable warning system if their numbers and locations were increased to broaden their reach and if they were enhanced with a customized message through LRAD.

FINDINGS — Evacuations

- F14. In the WUI and in many town centers, infrastructure and roads are inadequate for mass evacuations.
- F15. Evacuation routes are dangerously overgrown with vegetation and many evacuation routes are too narrow to allow safe passage in an emergency.
- F16. Emergency planners often do not publicize evacuation routes due to their mistrust of the public.
- F17. Town councils, planners, and public works officials have not addressed traffic choke points and, in some instances, they have created obstacles to traffic flow by the installation of concrete medians, bumpouts, curbs, speed bumps, and lane reductions.
- F18. No studies have been performed to determine how long it would take to evacuate entire communities via existing evacuation corridors.
- F19. The implementation of traffic-light sequencing and coordination to allow mass egress, and the conversion of two-way roads into one-way evacuation routes to ease traffic congestion, are dangerously delayed and years away from being implemented.
- F20. Public transit is a neglected asset of emergency response preparedness: all operators except one transit agency are left out of the command structure and none is integrated into the emergency radio communication system MERA.
- F21. A bureaucratic culture of complacency and inertia exists in Marin. Government often fails to act quickly to repair known gaps in emergency preparedness, to think flexibly, and to prioritize safety in its planning and policies.

FINDINGS — Umbrella

- F22. No countywide comprehensive, coordinated policies have been made and no funds have been allocated to prepare for wildfires.

RECOMMENDATIONS — Vegetation

- R1. Create a comprehensive, countywide vegetation management plan that includes vegetation along evacuation routes, a campaign to mobilize public participation, and low-income subsidies.
- R2. Hire at least 30 new civilian vegetation inspectors and at least eight fire/fuels crews focused on fuel reduction in the high risk areas of the county, including federal, state and local public lands.
- R3. Develop and implement a fast, streamlined procedure to enforce vegetation citations.

RECOMMENDATIONS — Education

- R4. Adopt and deliver a comprehensive education program focused on action for all residents of Marin on a regular schedule by a team of expert trainers.
- R5. Promote the creation of Firewise Communities in every neighborhood by all local jurisdictions.
- R6. Employ individuals with skills in public speaking, teaching, curriculum design, graphics, web design, advertising, community organization, community relations, and diplomacy to educate the public.

RECOMMENDATIONS — Alerts

- R7. Collect Marin residents' information and add it to Alert Marin and Nixle databases to make them opt-out systems.
- R8. Expand the use of sirens with LRADs.

RECOMMENDATIONS — Evacuations

- R9. Research, develop, and publish plans for the mass movement of populations along designated evacuation routes.
- R10. Give the highest priority to mitigating known choke points and to maximizing the capacity of existing evacuation routes.
- R11. Incorporate and prioritize plans for mass evacuations in all pending and future traffic/road projects along major escape routes.
- R12. Educate, prepare, and drill for evacuations in all communities.
- R13. Fully integrate public transit into the MERA communications system without further delay.
- R14. The Transportation Authority of Marin must convene all stakeholders no later than December 31, 2019, to address congestion on escape routes in an evacuation.

RECOMMENDATIONS — Umbrella Entity

- R15. Establish in the form of a Joint Powers Authority an umbrella organization for wildfire planning and preparedness (vegetation management, public education, alerts, and evacuation), funded by a ¼ cent sales tax.