

Town of Portola Valley
Ad Hoc Wildfire Preparedness Committee
Communications/Evacuation/Outreach Subcommittee
17 August 2021

Evacuation Update



Outline

- Evacuation Study RFP
 - Update
 - Next Steps
- Evacuation modelling
 - What we know
 - Preliminary Conclusions

Evacuation Study RFP

- RFP to study evacuation scenarios recommended by this committee
- Approved by Town Council
 - RFP required consultants to provide information for traffic evacuation study as well as to satisfy Safety and Circulation elements of the General Plan and compliance with SB 99 (single access neighborhoods) and AB 747 (Hazard Mitigation)
 - RFP requests identification of infrastructure improvements and other mitigation efforts to facilitate evacuation
- RFP was released in May
- Only two responses were received – disappointing*
- Consultants have been interviewed by subcommittee and Town Staff
- Final Recommendation to Town Council for Study is expected in September

Evacuation Modelling

- What we know
 - Approximately 7500 vehicles would evacuate PV and environs over Alpine Road and Portola Road; data from Zonehaven*
 - Single lane roads like Alpine and Portola can handle between 1700 and 2000 cars per hour during normal circumstances
 - Consultants use 950/1000 cars per hour per lane for evacuation modelling
 - Portola Valley has no evacuation routes to the West
 - Ladera and I280 intersections pose the greatest potential bottlenecks.
 - Consultants currently do not model impacts from: accidents, decreased visibility, rogue drivers, horse trailers, smoke, embers, and even night vs. day.
 - Consultants do not have viable dynamic traffic models

Evacuation Modelling

- Preliminary Conclusions

- In an orderly evacuation with adequate notice, current infrastructure can easily handle the anticipated traffic* (e.g. CZU)
- With short notice and high participation, static models will likely produce evacuation times between 2 hours and 4 hours* (does not mean cars are stuck in traffic for that long)
- Considerable uncertainty due to items that are difficult to model
- Ladera and I280, at least, will require traffic control to maximize flow
- Single lane outbound will be probable because of necessary ingress lane for first responders*
- Portola Valley does not have enough ROW to expand Alpine or Portola beyond current 2 lanes. Alpine Road in Ladera is County responsibility.
- Various fire scenarios will result in different exit routes and different results

Evacuation Modelling

- **Dynamic Traffic Model**
 - Dave Cardinal has developed his own dynamic traffic model
 - It appears to be far more flexible than what is available from consultants
 - Additional data will result from traffic study that should improve the model and sensitivities
 - Most scenarios currently show evacuation times of between 2 and 3 hours to completely evacuate. Efforts are underway to incorporate more complex variables (like accidents) into the model.
 - This model could be an important planning tool moving forward
 - Lessons learned: Leave Early