June 11, 2025
CITY OF ORINDA
SUPPLEMENTAL SALES TAX OVERSIGHT COMMISSION
REGULAR MINUTES

D. Presentation
D.1. Ladris Technologies, Wildfire and Evacuation Modeling

Outreach and Education Coordinator James Duff introduced Leo Zlimen, CEO of Ladris AI, an artificial intelligence and machine learning company specializing in risk management and traffic evacuation modeling for counties and municipalities across nine states, serving 40-50 customers. Zlimen noted the company was created to address evacuation issues, which are becoming increasingly important as fires and floods worsen. He demonstrated Ladris' evacuation modeling software using Woodside and Portola Valley as examples. The model showed that in a no-notice evacuation scenario, it would take approximately 2 hours and 44 minutes to evacuate the area. He explained how the model integrates fire spread patterns with evacuation timelines, allowing communities to understand where residents might be in relation to an advancing fire.

Commissioners asked about the inclusion of windblown embers in the fire model, wind direction modeling, and real-life compliance with evacuation orders. Zlimen demonstrated how the model can incorporate different variables such as phased evacuations, traffic accidents, and infrastructure changes.

He also demonstrated how phased evacuations, although not significantly altering the total clearance time, could reduce the trip time for the slowest person by approximately 35-40 minutes. He emphasized that the data-driven approach enables communities to make more informed evacuation decisions.

In response to questions from Commissioner Lee, Zlimen confirmed that the model can incorporate data from surrounding areas, such as Moraga, to account for their impact on evacuation routes. Additionally, Zlimen stated that data updates are handled through contracts with traffic data providers, manual verification, and spot checks. Regarding cost of the service, Zlimen noted that the city was looking at a package exceeding $200,000 per year, which would include several modules such as situational detection, fire modeling, evacuation modeling, and public education.