Introduction to Randall Okaneku

- Engineer, licensed in Hawai`i in 1980
- Principal of The Traffic Management Consultant
- Specializes in traffic engineering and transportation planning
What is the TIAR?

- Traffic Impact Analysis Report for the proposed HoKua Place
- Analyzed the traffic impacts during the AM and PM peak hours of traffic, and mid-day traffic
Traffic counts were not updated in 2020

- Traffic is reduced during the COVID-19 pandemic due to a decrease in tourism, work from home orders and virtual school attendance
- Reduced traffic counts would not provide an accurate basis to predict future traffic and trip generation
TIAR Methodology

- Evaluation of existing roadways and existing traffic conditions at major intersections in Kapaa in 2017
- Traffic count surveys, including turning movements during AM and PM peak periods of commuter traffic, as these are generally periods of highest traffic generated by a residential development such as HoKua Place.
- Estimate of projected traffic increases without project based upon the anticipated growth in traffic in the Kapaa area developed in the Kauai Long-Range Land Transportation Plan.
- Development of trip generation characteristics of proposed project and identification of traffic impacts of HoKua Place
- Recommendation of roadway improvements to mitigate traffic impacts of HoKua Place
Map of Area Evaluated in the TIAR
TIAR Conclusions-General and Road A

- Road A is major connector road in HoKua Place
  - AM peak: 200 vehicles per hour from the Olohena Road/Kapaa Bypass Road roundabout intersection
  - PM peak: 300+ vph
- Access to and from HoKua Place will be provided via a new roundabout intersection of Road A and Kapaa‘a Bypass Road and a new Tee-intersection of Road A and Olohena Road.
- HoKua Place will generate 443 trips during the morning peak hour and 509 trips during the afternoon peak hour.
TIAR Conclusions-Kuhio Highway/Kukui Street

- Intersection of Kūhiō Highway at Kukui Street
  - AM peak:
    - Intersection
      - With or without HoKua Place: LOS A during AM peak hour.
    - Left-turn movement on makai bound Kukui Street
      - With out without HoKua Place: LOS F in AM peak hour.
  - PM peak:
    - Intersection
      - With or without HoKua Place: LOS A during PM peak hour
    - Left-turn movement on makai bound Kukui Street
      - With or Without HoKua Place: LOS E in PM peak hour

- State DOT-proposed Kapaa Bypass Extension is expected to mitigate the LOS E and F conditions on Kukui Street.
TIAR Conclusions-Other Intersections

- Roundabout intersection of Olohena Road and Kapaa Bypass Road
  - AM peak:
    - Improve from LOS E to LOS D during AM peak hour
  - PM peak:
    - LOS D, but overall delay at the intersection will be reduced by the Project
- Intersection of Kuhio Highway and Kapaa Bypass Road
  - AM peak:
    - With or without HoKua Place: LOS D and E (depending on right turn and left turn movement)
  - PM peak:
    - With or without HoKua Place: LOS D and E (depending on right turn and left turn movement)
HoKua Place Traffic Improvements

- Construct Road A from Olohena Road through the Project to Kapaa Bypass Road
- Construct a single lane roundabout at intersection of Road A and Kapaa Bypass Road
- Construct a new Tee-intersection at Road A and Olohena Road.
- HoKua Place will have a positive impact as Road A will divert about 200 vehicles per hour from the Olohena Road/Kapaa Bypass roundabout intersection, during the AM peak hour of traffic and over 300 vph during the PM peak hour of traffic. As a result, Road A will mitigate HoKua Place’s traffic impacts on the Olohena Road/Kapaa Bypass roundabout.
Off-Peak Hour Traffic

- Traffic Counts: Off-peak hour traffic is highest during late morning.
- Project trip generation and resulting traffic movements will be lower during off peak hours.
HDOT projects-Kapaa Highway Improvements

- Widening of Kuhio Hwy to add a southbound lane will provide 2 through lanes in each direction from Kapaa Bypass Road to Kuamoo Road
- Proposed widening of Kapaa Bypass Road from Olohena Road to Kuhio Highway from a one lane southbound road to a two lane, two-way roadway.