

# Agenda

## Overview

- Background
- Current Position

## Flight Procedures Assessment Objective

- Reduce Annoyance & Enhance Safety
- What's possible – What's Impossible

## Review the proposed routes (Slide 11,12,13,18,19)

- Do these support the objective

## Review the strategic and tactical outreach methodology

- Is it concise and understandable

## Direction to Staff:

1. Do the FP's support the TTAD objective to reduce annoyance and enhance safety?
2. Does the Board want to proceed with some/all of the FP alignments outlined in the report?
3. Is the outreach material satisfactory? Does it depict the FP concept and specific neighborhood impacts properly in an understandable way?
4. Should the District conduct test flights or compile video analysis with a turbine aircraft?
5. Should Staff and the consultant team develop additional outreach collateral such as spaghetti maps designed to depict existing, neighborhood specific impact?

Truckee Tahoe Airport District



Flight Procedures  
Outreach Program

Truckee Tahoe Airport District

# FLIGHT PROCEDURES

## Outreach Program

[Flightpaths.truckeetahoeairport.com](https://flightpaths.truckeetahoeairport.com)

Connected by more than a runway.



Flight Procedures  
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Truckee Tahoe Airport District

# INTRODUCTION

- The Truckee Tahoe Airport District (TTAD) has taken the initiative to design flight procedures intended to accommodate the community, reduce noise and annoyance, and comply with federal criteria.
- As the community changes, so does the aircraft flown around Truckee Tahoe. Aircraft have a wide array of performance standards, which affects their height, speed, and the flight paths they are able to use.
- These proposed designs are conceptual. Only the FAA can certify the final flight procedure. In this presentation, the phrase “existing FAA” means the flight path is currently certified and in use. “Proposed FAA” means the path is only conceptual, and would require FAA approval. “Voluntary” means the TTAD has requested pilots fly this path to reduce impacts on the community, but there is no formal FAA involvement.
- It may take 3 – 5 years to get conceptual designs approved.



Flight Procedures  
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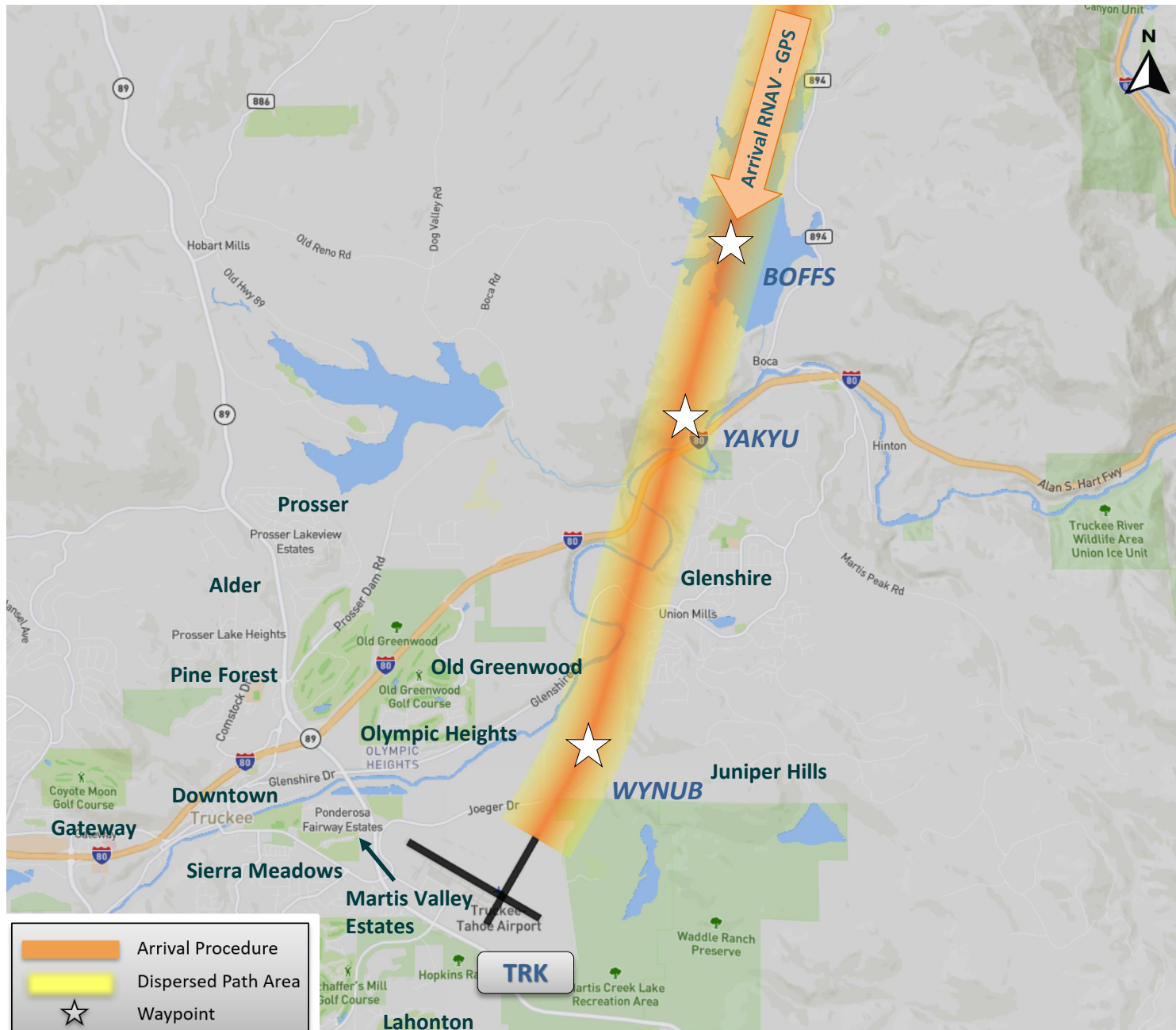


## Truckee Tahoe Airport District

### Current FAA Arrivals Landing to the East – Runway 11

- Aircraft arrive from all directions at a point near the Sierra Crest.
- Aircraft fly southeast and descend over Tahoe Donner and Alder Hill.
- Aircraft descent to 1,900 feet above the ground then maneuver visually to land.



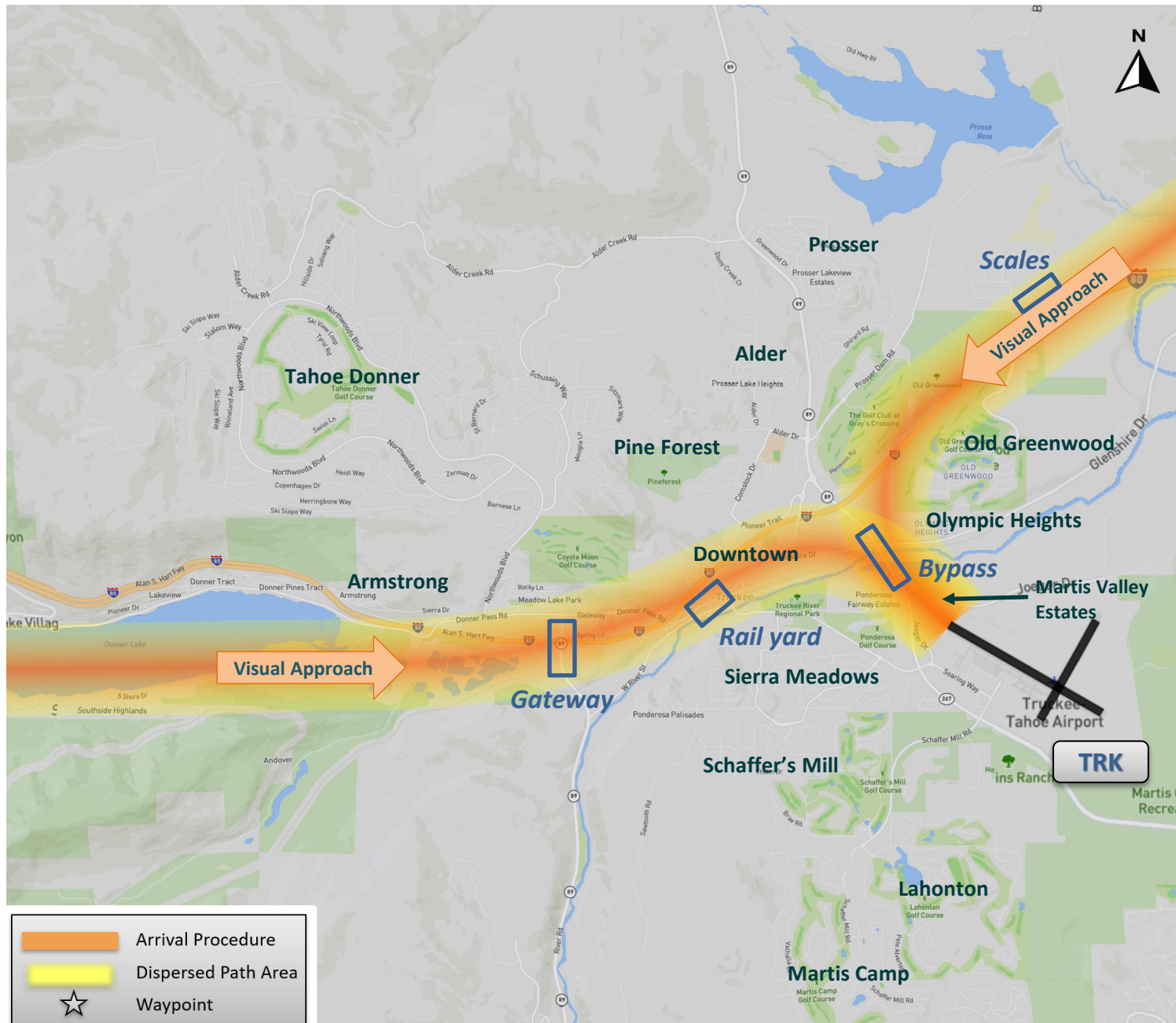


## Truckee Tahoe Airport District

### Current FAA Arrivals Landing to the South – Runway 20

- Aircraft arrive from all directions at a point north of Stampede Reservoir.
- Aircraft fly south and descend just west of Glenshire.
- Aircraft descend to approximately 500 feet, then maneuver visually to land. Some aircraft fly over Glenshire.



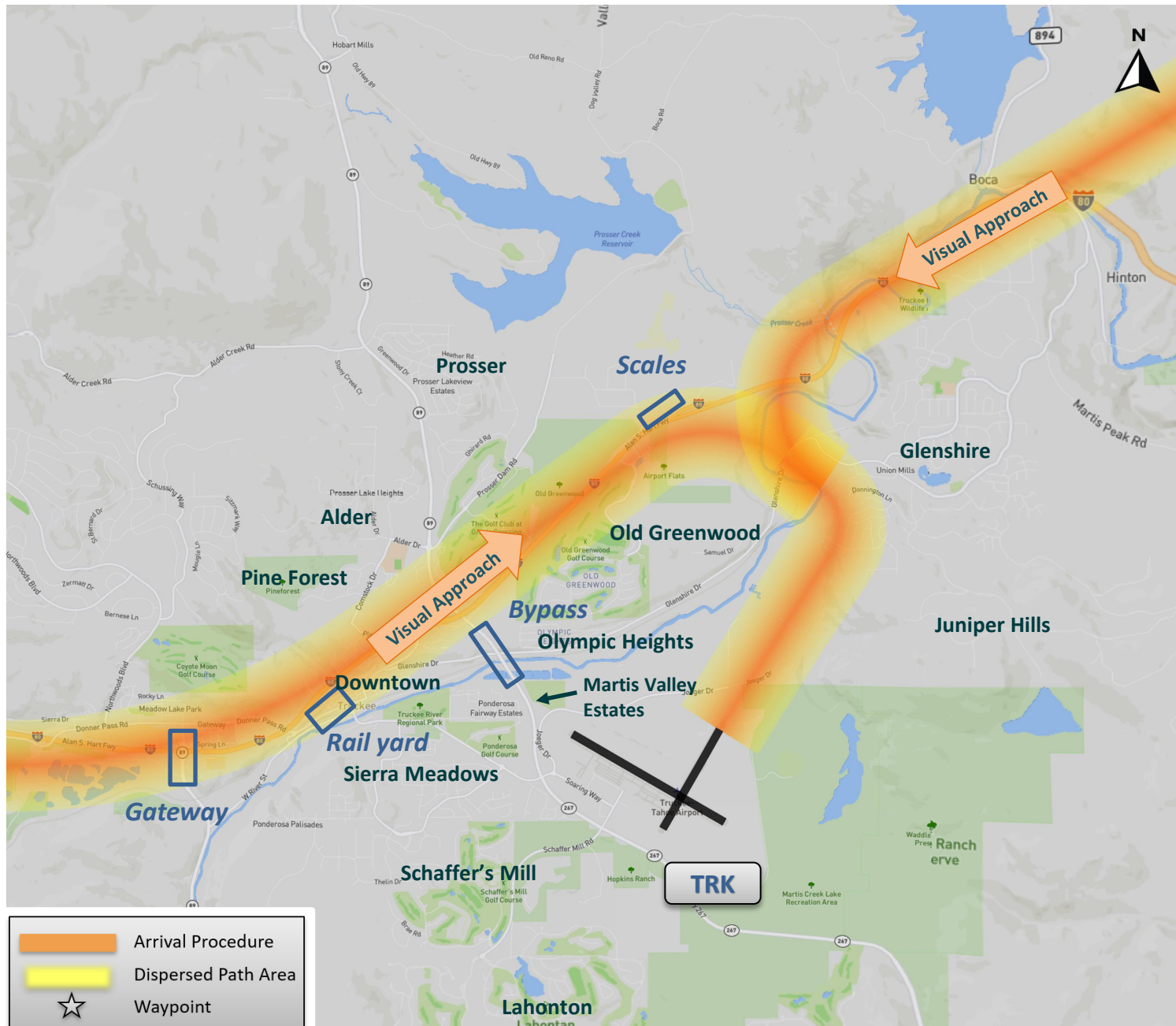


## Truckee Tahoe Airport District

### Current Airport Promoted Voluntary Arrivals from the East and West – Runway 11

- Aircraft arriving from the west fly over Ponderosa Palisades, Sierra Meadows and Northstar.
- Aircraft arriving from the east fly over Gray's Crossing, Old Greenwood and Olympic Heights. Some aircraft may fly over Glenshire.





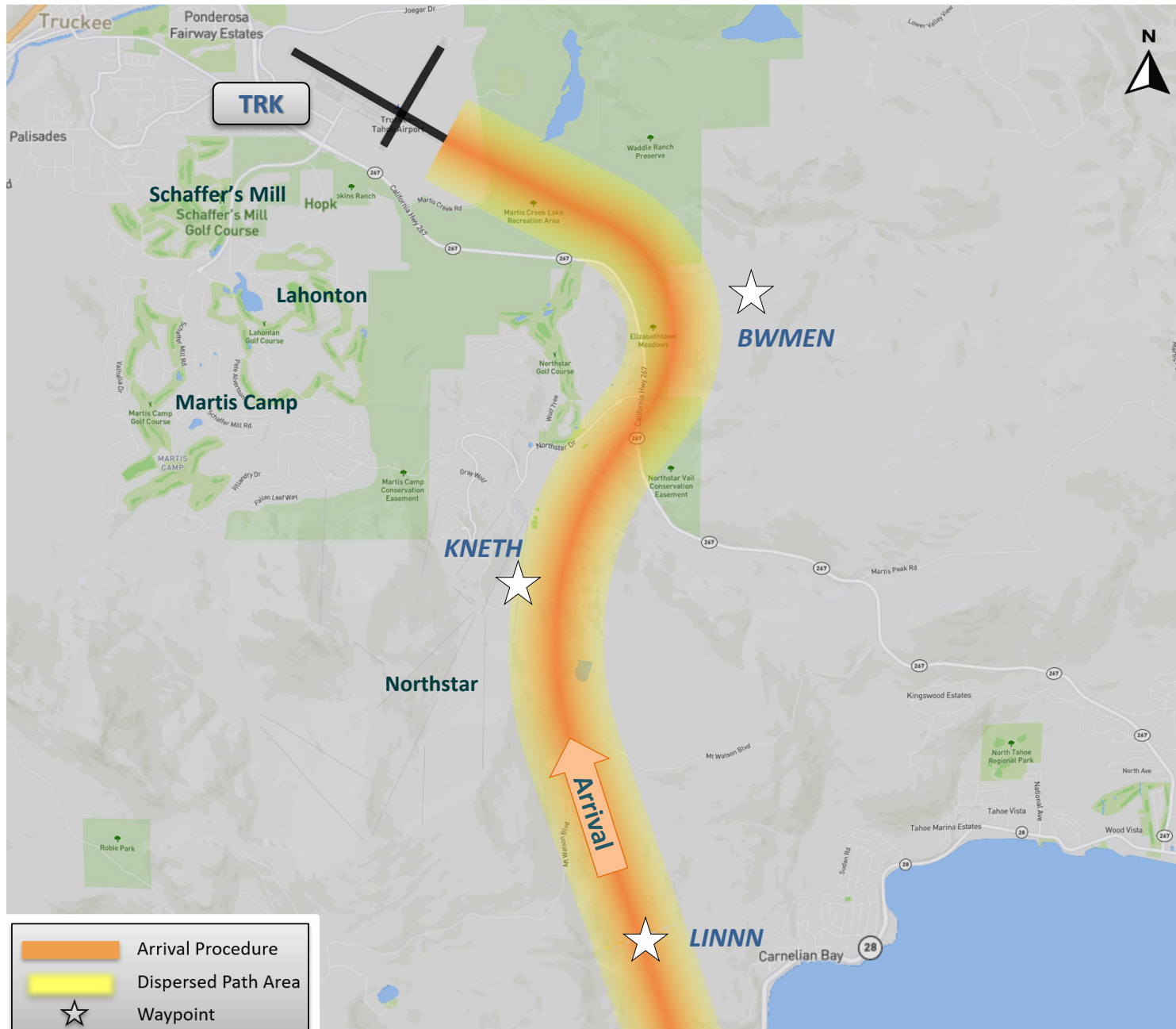
## Truckee Tahoe Airport District

### Current Airport-Promoted Voluntary Arrivals from the East and West – Runway 20

- Aircraft arriving from the west fly over Gateway, Pine Forest and Coachland.
- Aircraft arriving from the east may fly over Glenshire.



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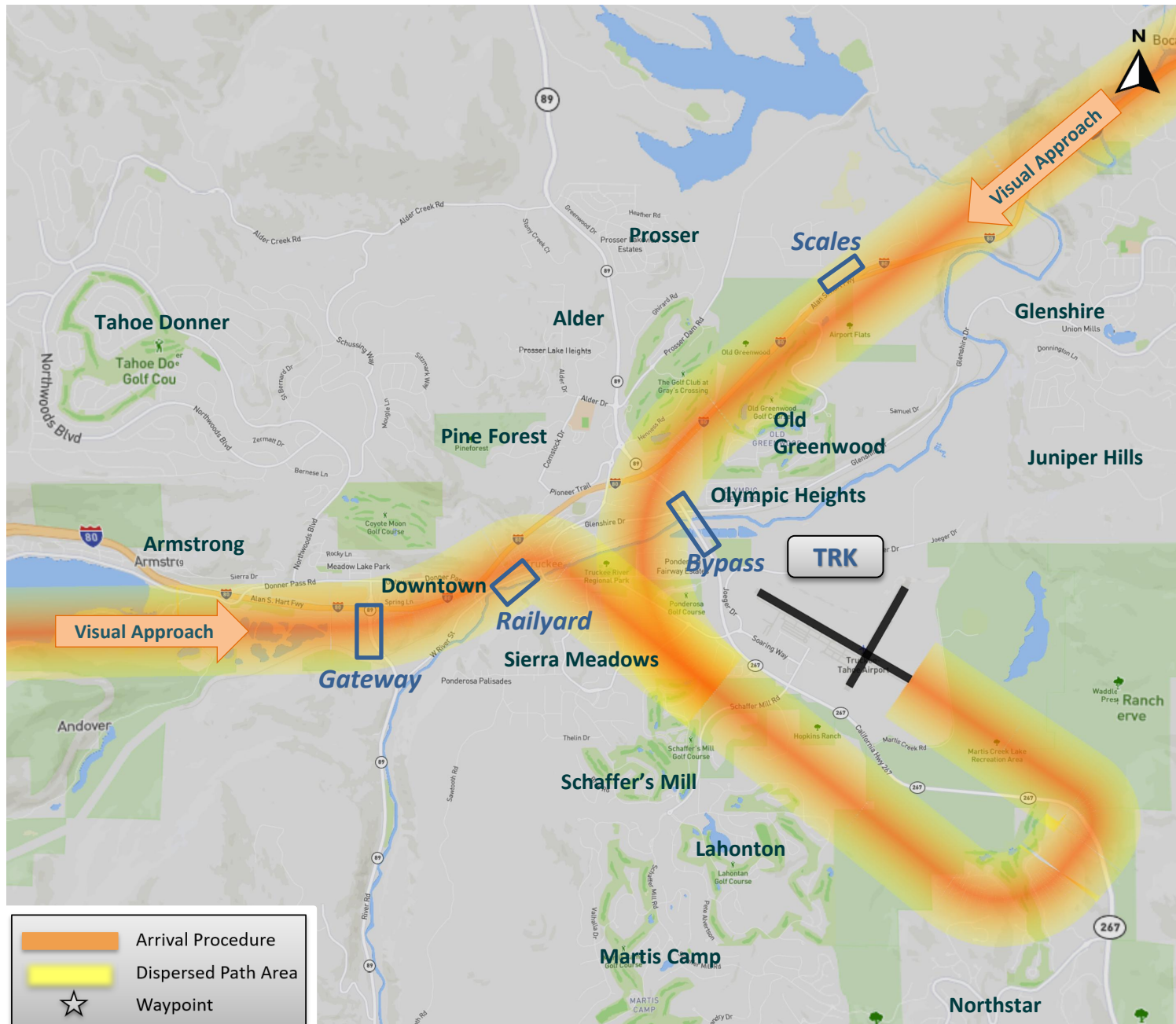


## Truckee Tahoe Airport District

### Current Airport-Promoted Voluntary Arrivals from the South and West – landing to the West - Runway 29

- Aircraft maneuver visually to Runway 29.
- Aircraft fly over the Ritz Carlton and Northstar.
- Aircraft may maneuver close to the ground.



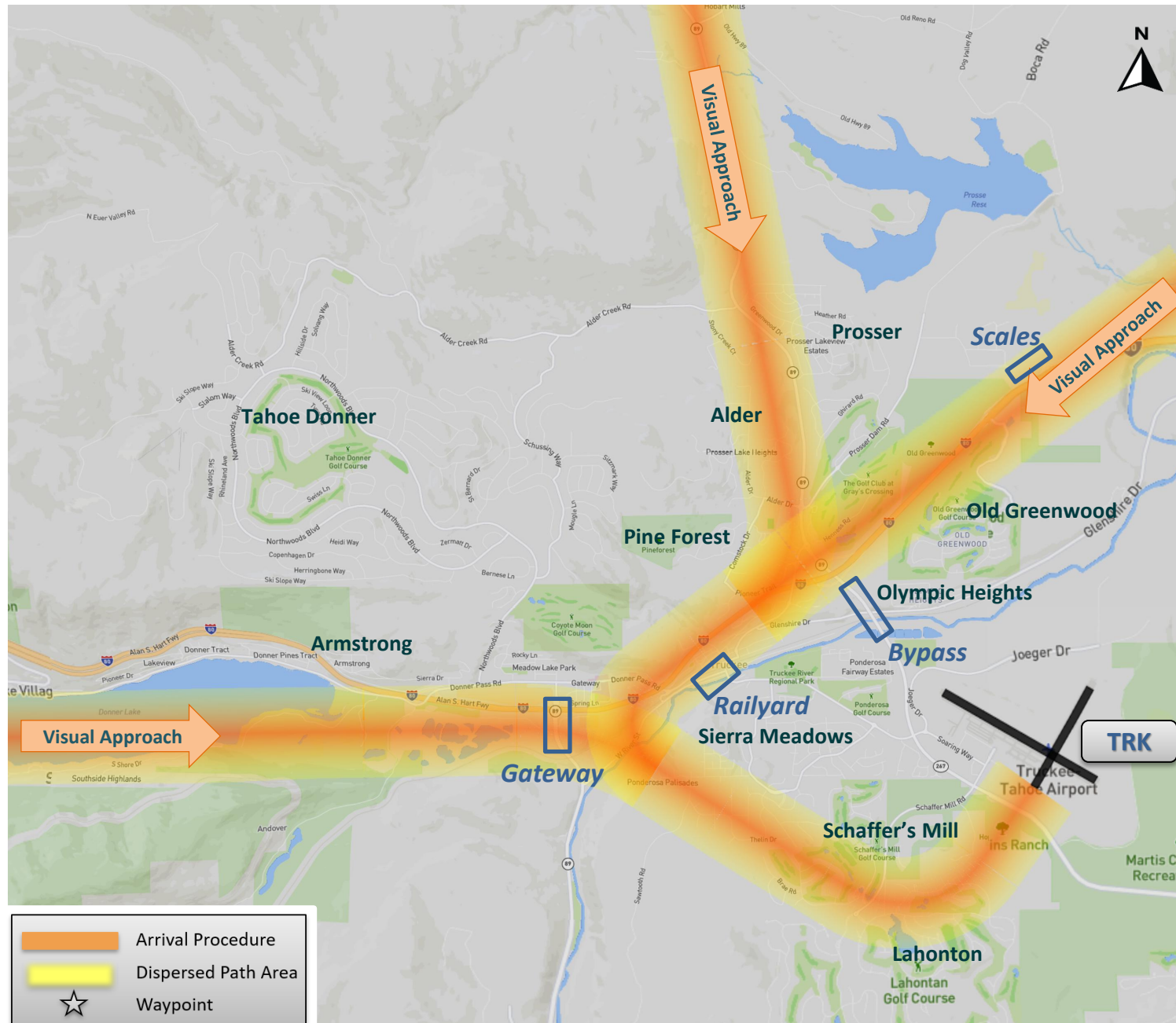


## Truckee Tahoe Airport District

### Current Airport-Promoted Voluntary Downwind Arrivals from the East and West – Runway 29

- Aircraft arriving from the west fly over Ponderosa Palisades, Sierra Meadows and Northstar.
- Aircraft arriving from the east fly over Gray's Crossing, Old Greenwood, Olympic Heights, Ponderosa Palisades, Sierra Meadows and Northstar.





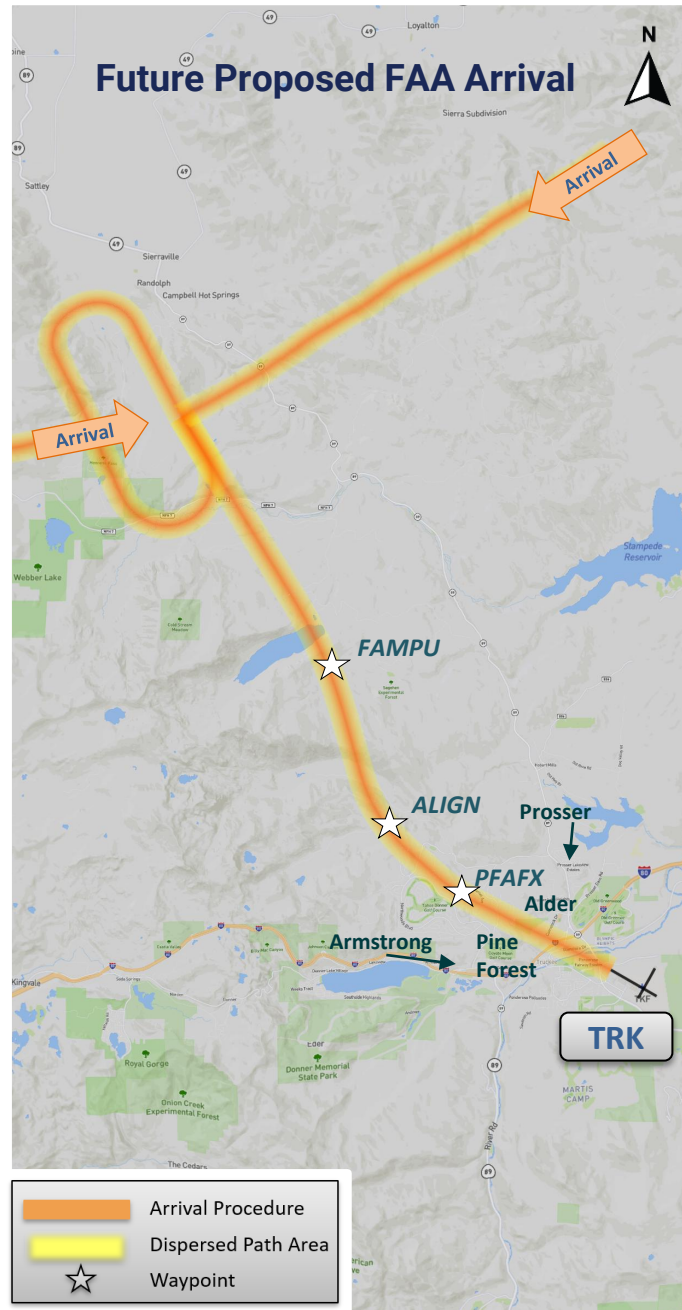
## Truckee Tahoe Airport District

### Current Airport Promoted Voluntary Arrivals from the North, East and West – Runway 02

- Aircraft arriving from the west fly over Ponderosa Palisades, Sierra Meadows and Northstar.
- Aircraft arriving from the east fly over Gray's Crossing, Old Greenwood, Olympic Heights, Ponderosa Palisades, Sierra Meadows and Northstar.



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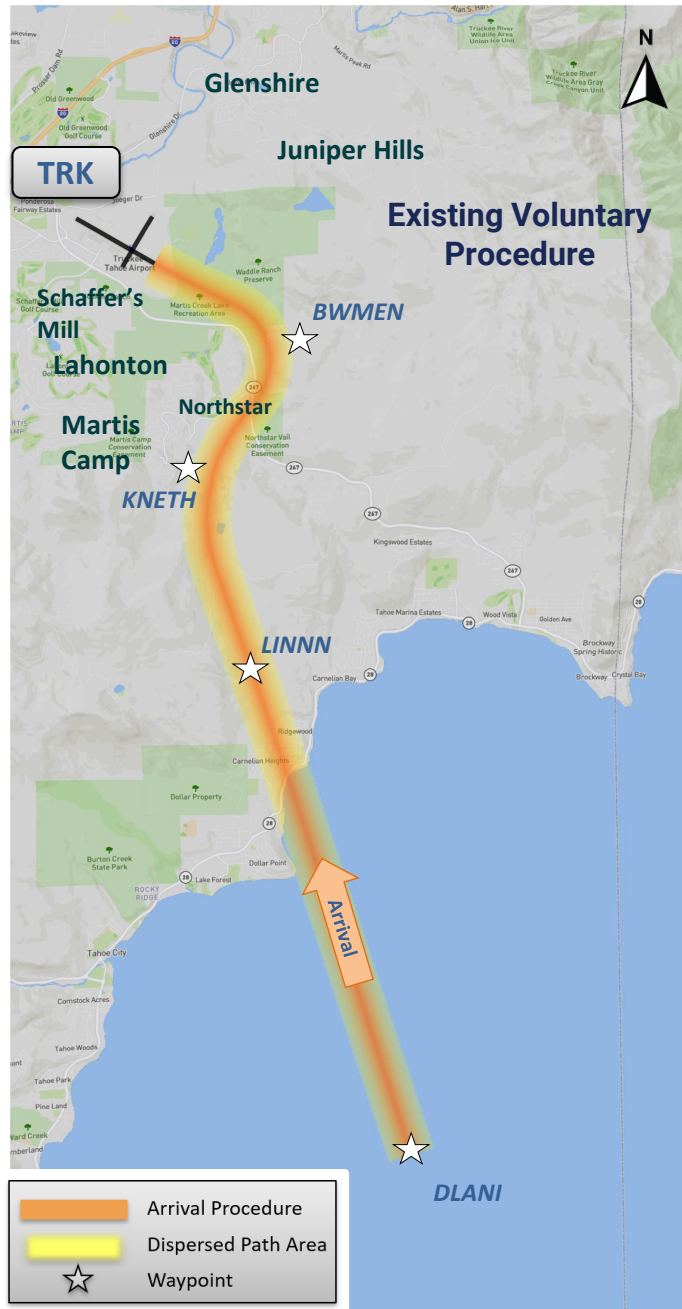
## Truckee Tahoe Airport District

### Existing Procedure and Future Proposed FAA Arrival from the North – Runway 11

- Currently aircraft arrive from all directions at a point near the Sierra Crest.
- Proposed procedure includes a “holding stack” for aircraft to descend to land.



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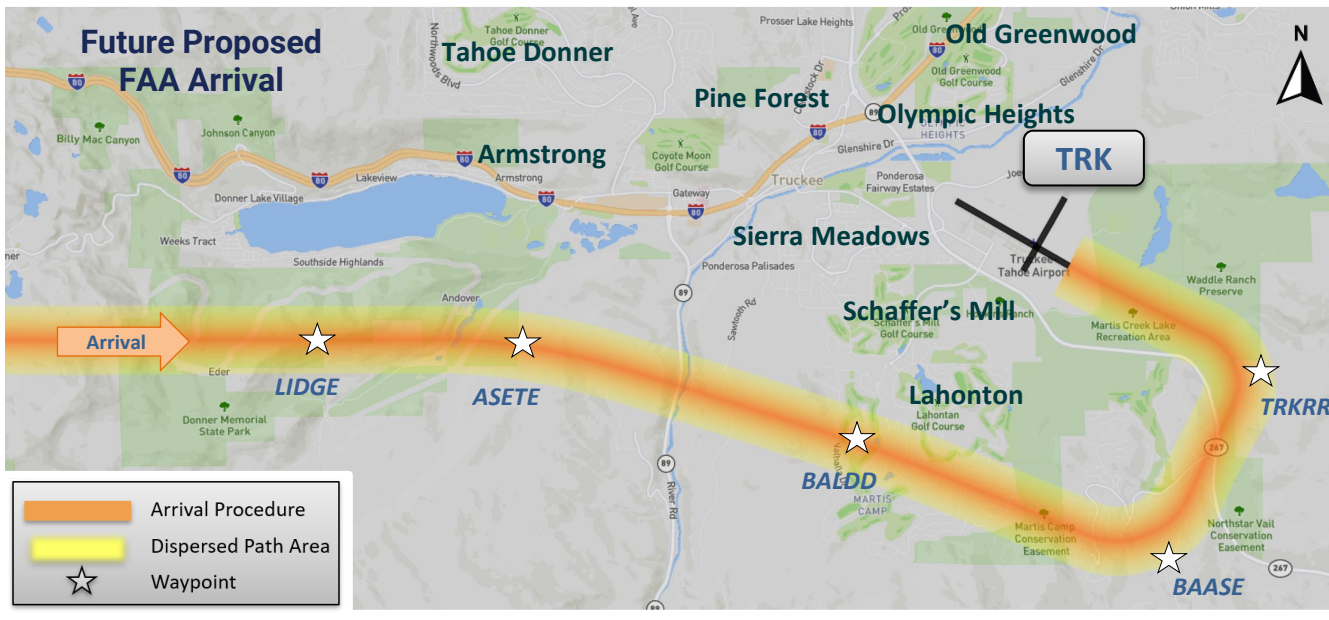
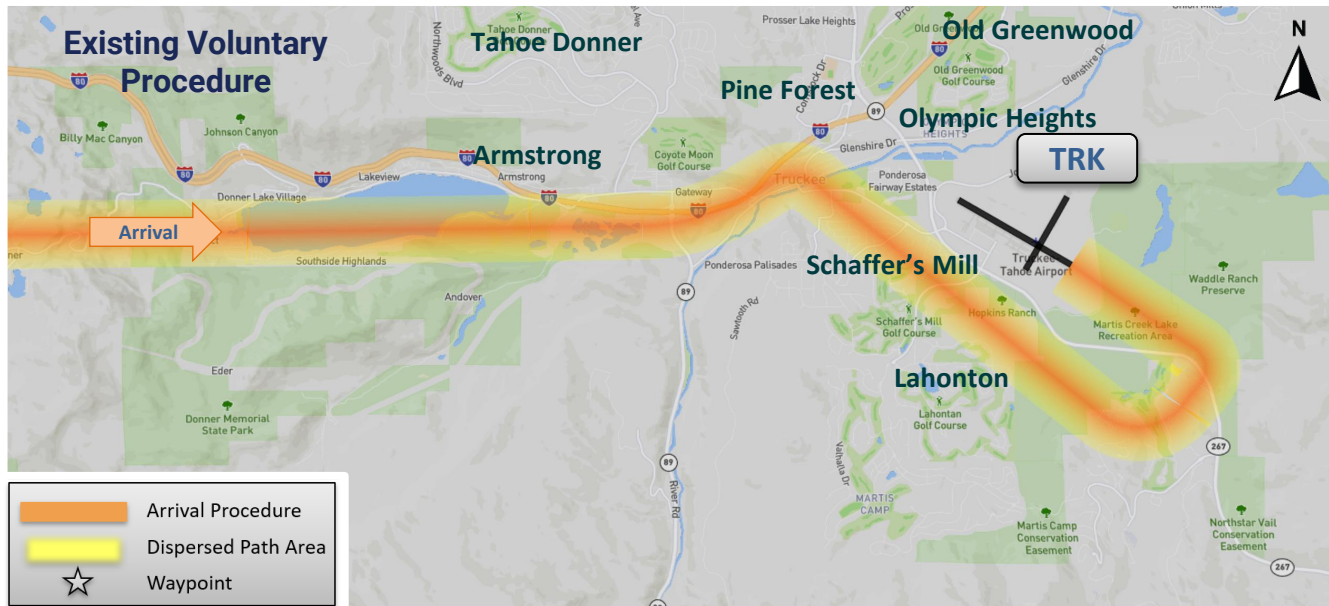


## Truckee Tahoe Airport District

### Existing Voluntary and Proposed FAA Arrivals to the West –Runway 29

- Currently aircraft maneuver visually to Runway 29.
- Aircraft fly over the Ritz Carlton and Northstar.
- Aircraft may maneuver close to the ground.
- Proposed procedure includes charted, FAA-approved “fly visual” segment.
- Similar path to existing visual procedure except it is FAA certified.
- The two alignments are not much different with respect to overflight impacts.



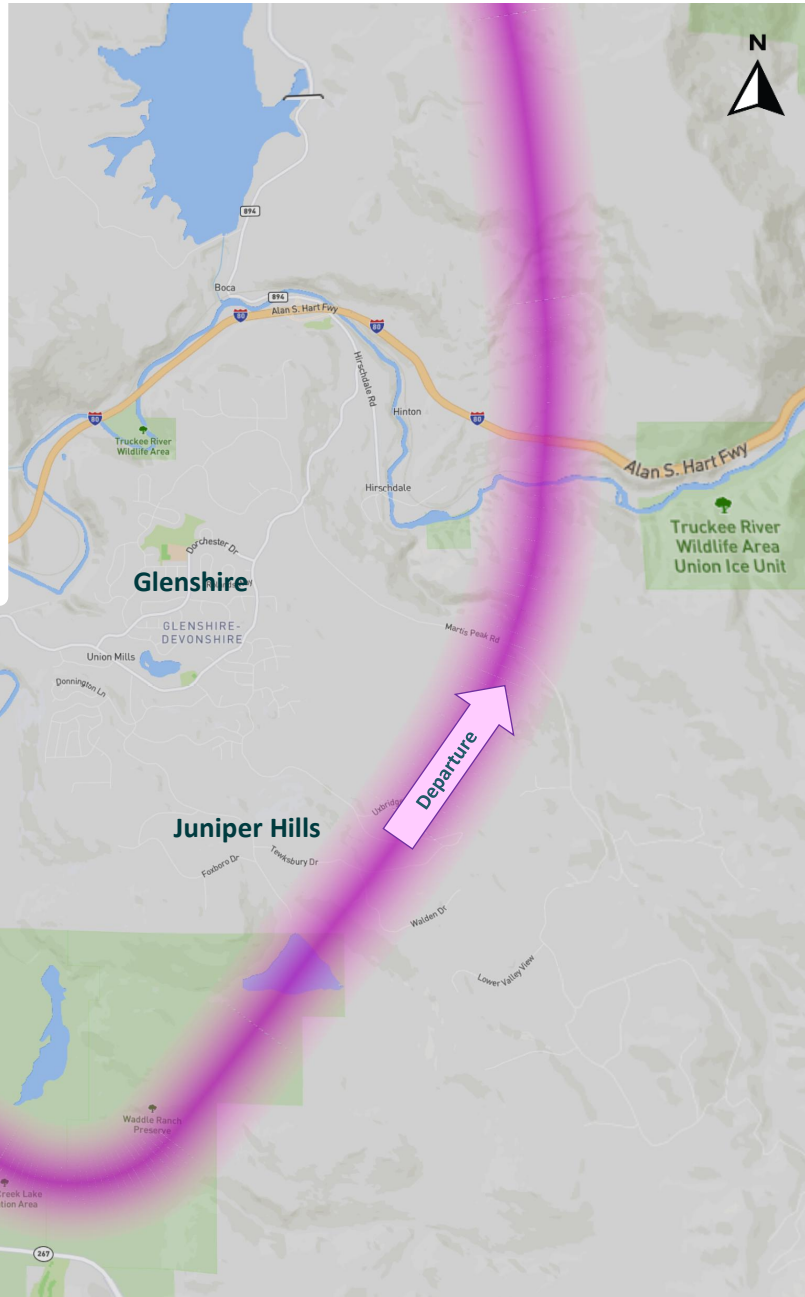
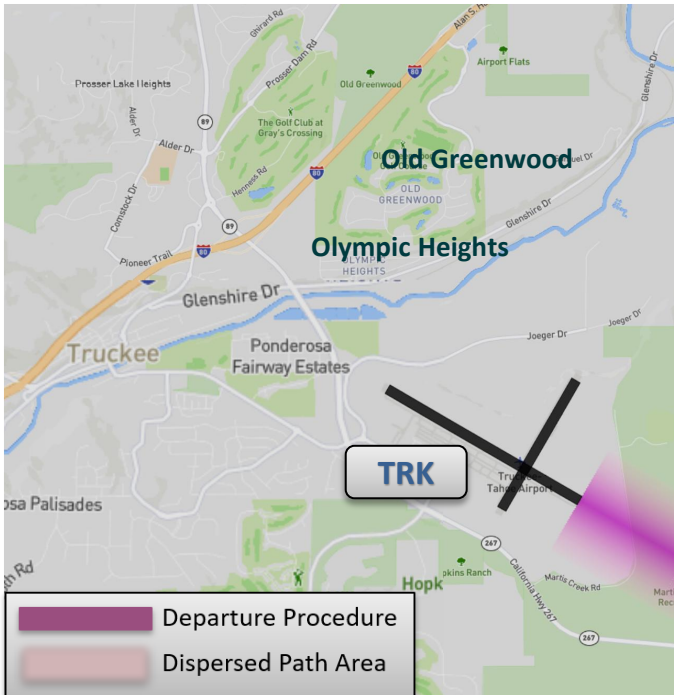
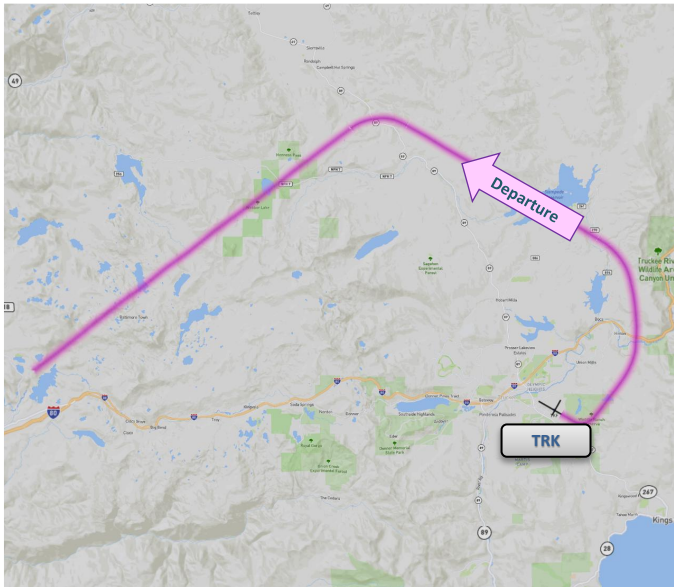


## Truckee Tahoe Airport District

### Existing Voluntary and Proposed FAA Downwind Arrivals landing to the West – Runway 29

- Currently Visual approaches arrive from the west on the I-80 corridor.
- Aircraft arriving from the west will continue to fly over Ponderosa Palisades, Sierra Meadows and Northstar.
- Aircraft on the downwind portion will be further south, flying over Lahontan, Northstar and Martis Camp.
- Possible reduction in impact based on constant decent rate.
- Most popular arrival pattern at KTRK.



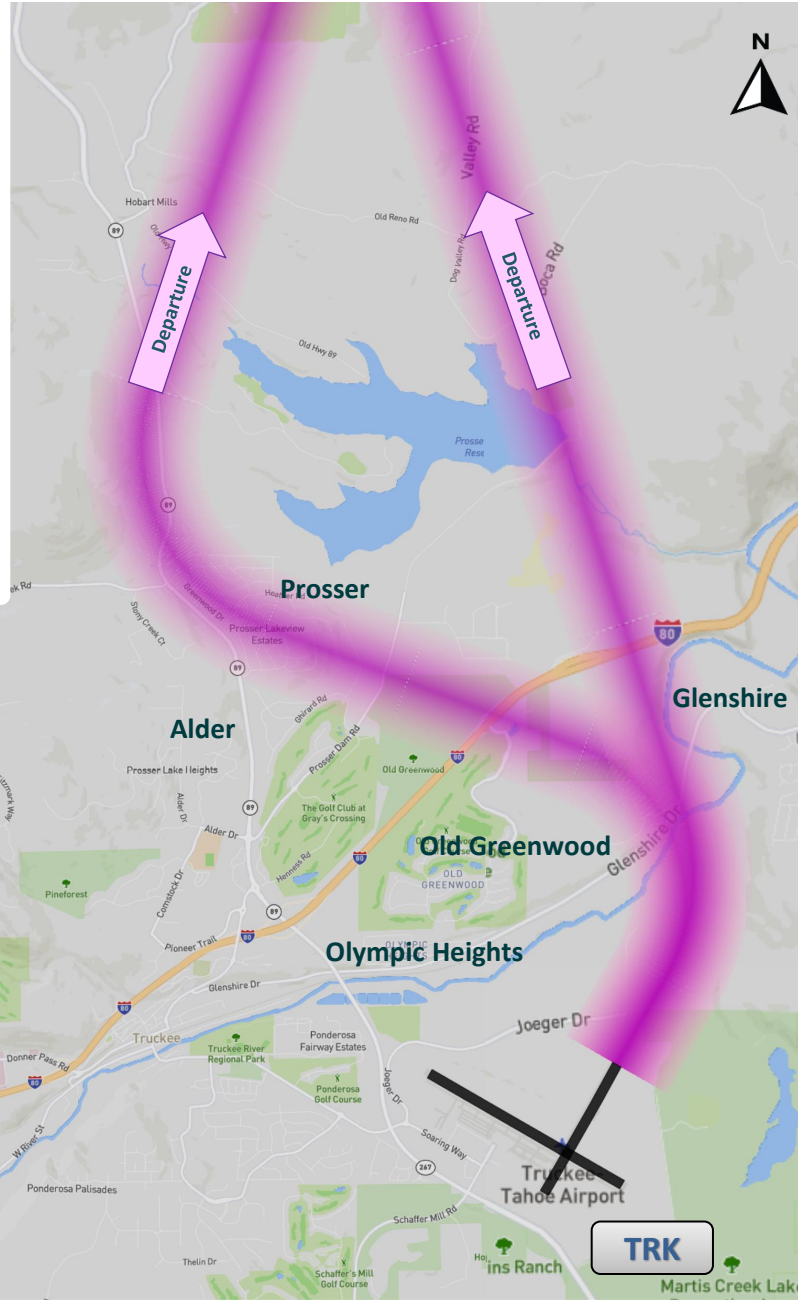
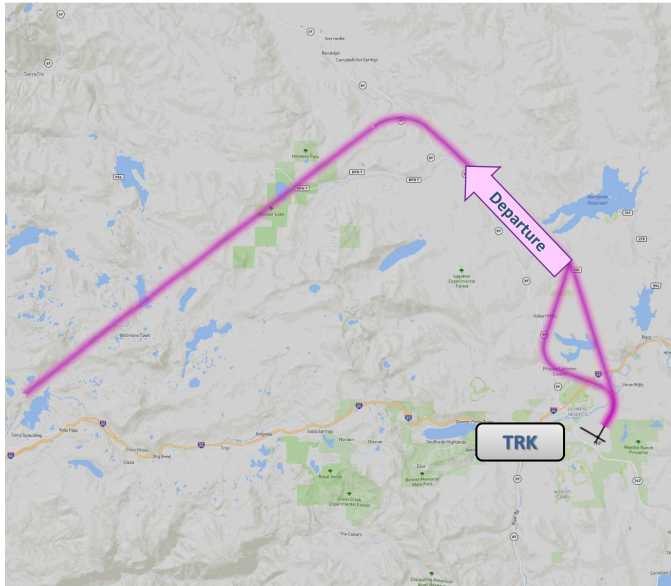


## Truckee Tahoe Airport District

### Current Voluntary Visual Departure – Runway 11

- Aircraft departing using visual references.
- Aircraft may circle back and head west.
- Departing, then turning to the right is not possible due to terrain.
- There are possible conflicts in the summer with glider operations.



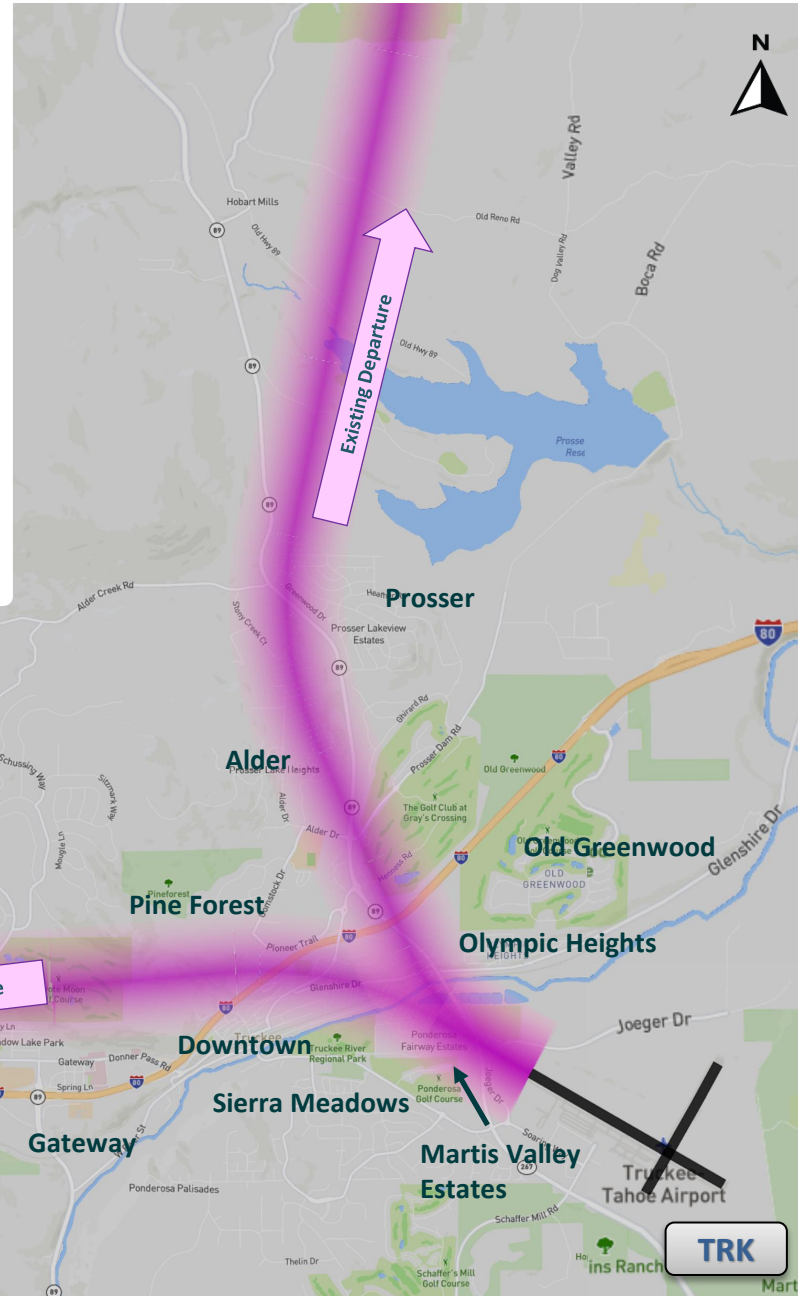
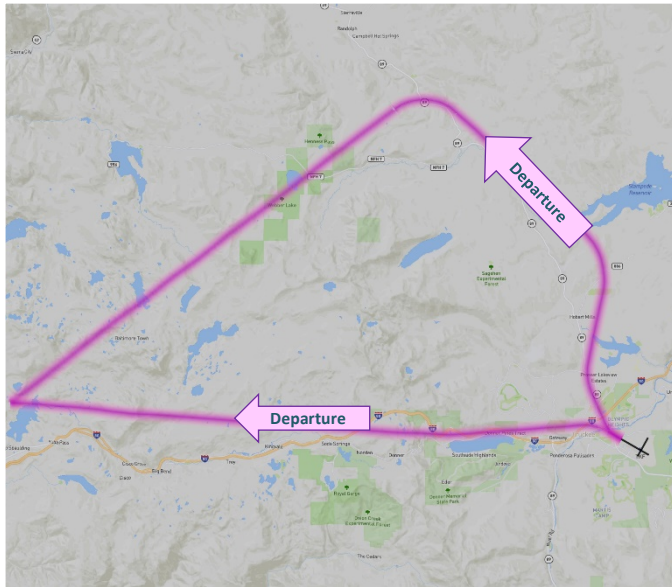


## Truckee Tahoe Airport District

### Existing FAA Departure – Runway 02

- Aircraft use instrument navigation, not visual references.
- Aircraft depart and fly to the north to a navigation point north of Stampede Reservoir.
- Departing aircraft may fly over Glenshire, Old Greenwood, Gray's Crossing and Prosser Lake.



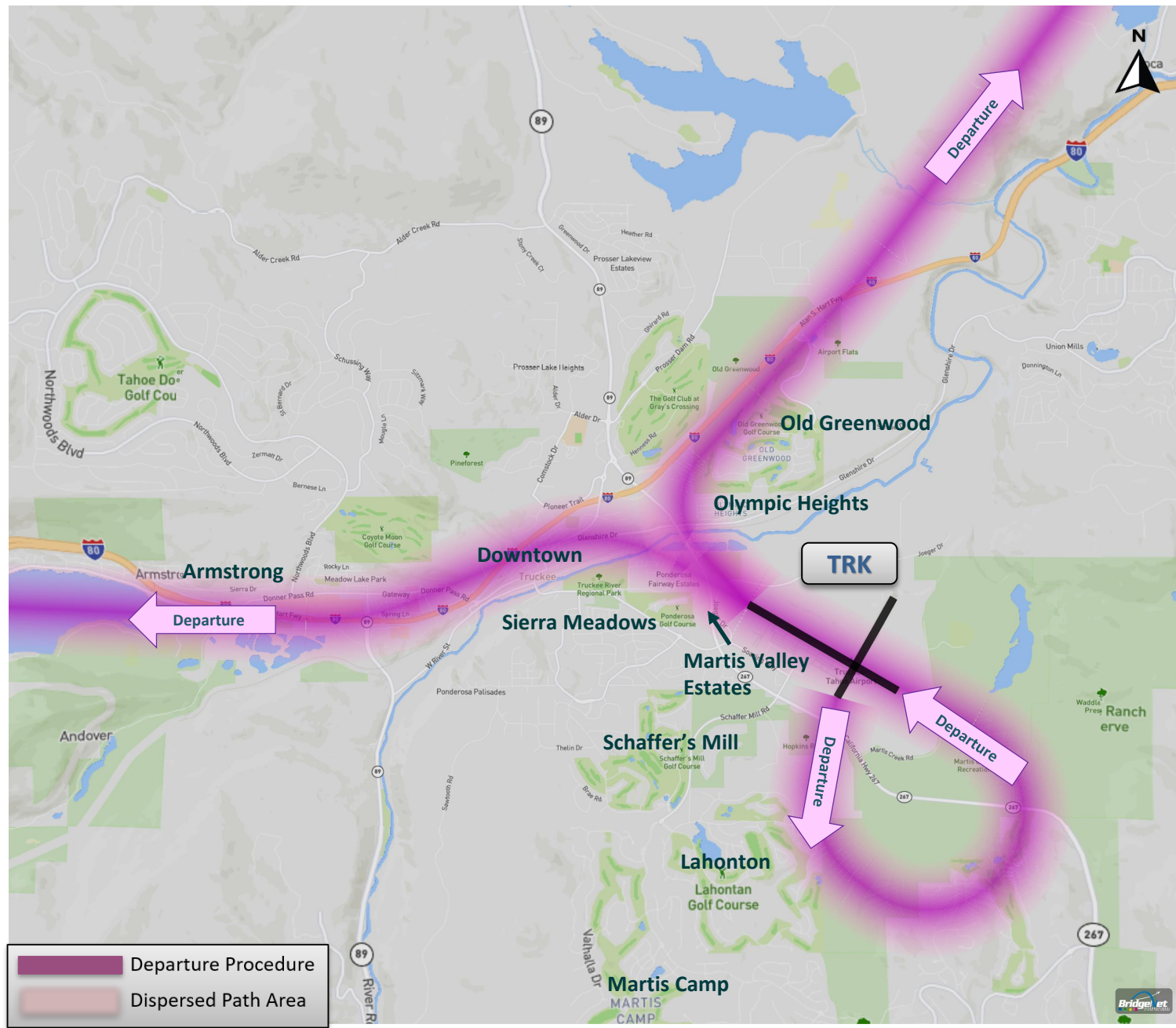


## Truckee Tahoe Airport District

### Current Departure Runway 29

- Aircraft use visual references for departures from all runways.
- Departing aircraft may fly over Greenwood and Prosser Estates when flying to the north.
- Aircraft departing to the west may overfly Prosser Lake Estates, Coyote Moon and the north side of Donner Lake.





## Truckee Tahoe Airport District

### Current Voluntary Visual Departure - Runway 20

- Aircraft depart visually to avoid terrain.
- Aircraft may remain in the airport vicinity as it executes a climbing 270-degree left turn.
- Due to potential arrivals on an instrument flight plan, departing and climbing to the right is not possible.
- Occasional straight-out departures are possible, which would overfly Lahontan, Martis Camp and portions of Sierra Meadows.





## Truckee Tahoe Airport District

### Existing Voluntary and Proposed FAA Departures to the North - Runway 11

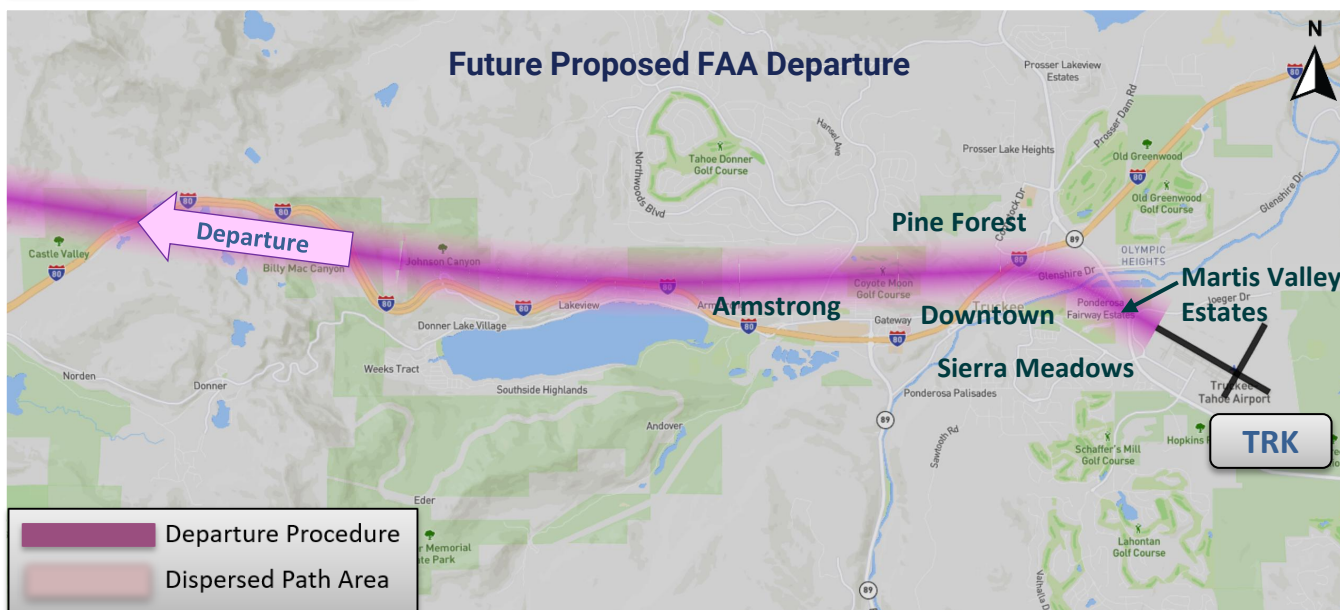
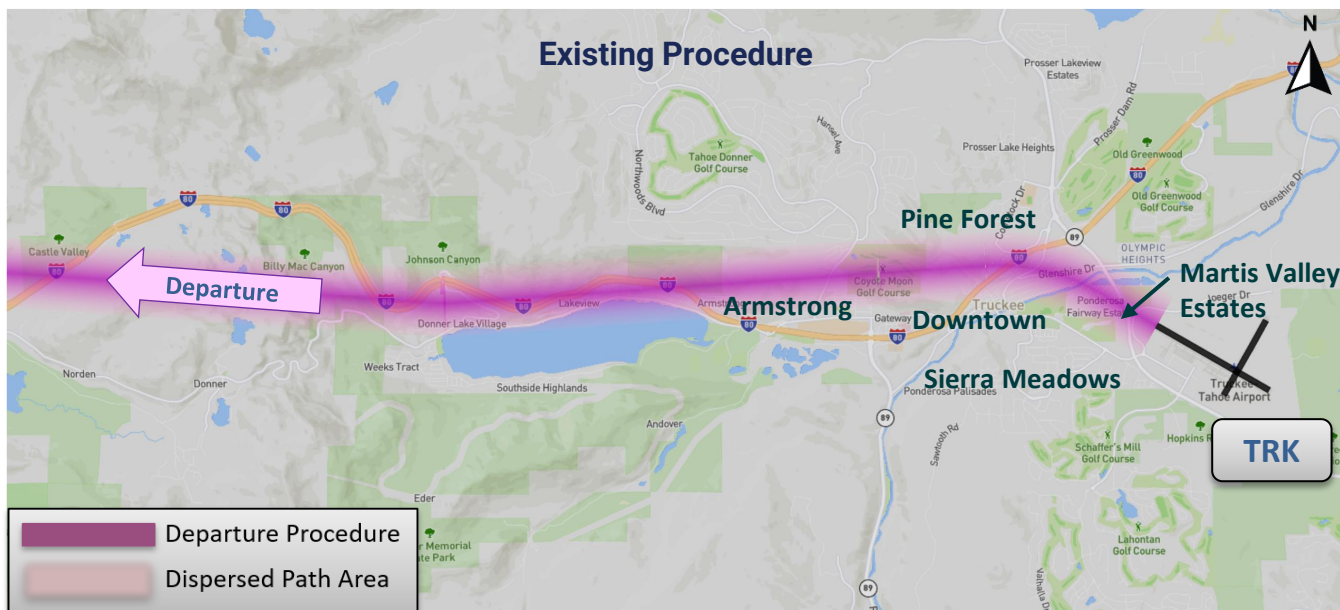
#### Existing Voluntary Procedure

- Aircraft depart using visual references.
- May circle back and head west.
- Departing and turning right is not possible due to terrain.
- There are possible conflicts in the summer with glider operations.

#### Proposed FAA Procedure

- Aircraft will use instrument navigation, not visual references.
- Aircraft will fly east of Glenshire and Boca Reservoir.
- Aircraft may fly over Juniper Hills and Martis Peak.
- Residents in Glenshire may perceive overflights.





## Truckee Tahoe Airport District

### Existing and Proposed FAA Departure to the West – Runway 29

- Existing procedure is seldom used by large aircraft.
- Proposed procedure has the shortest track miles of any departure toward the common city pairs.
- Proposed departure will fly over Martis Estates, Pine Forest, Alder Hill and Tahoe Donner.
- Proposed procedure uses Runway 29 that commonly favors use based on wind and length.
- High-capacity throughput allows for fewer ground delays.

