



# Advance Signal Warning System Project Update

February 2, 2022

# ADVANCE SIGNAL WARNING SYSTEM

ASWS are used to alert drivers when certain features are necessary to provide specific advance notice for a signalized intersection.



ASWS include the yellow signs stationed over the roadway that often feature flashing yellow lights to warn of a traffic signal ahead.



## Considerations listed in the State Guidance

- Limited Sight Distance
- Isolated or Unexpected Intersection
- High Speed
- Engineering Judgment



**WHEN SIGNAL IS FLASHING AND TRAFFIC LIGHT IS CLEARLY VISIBLE**



▶▶ **FLASHING SIGNAL = DRIVERS SPEED UP** ▶▶

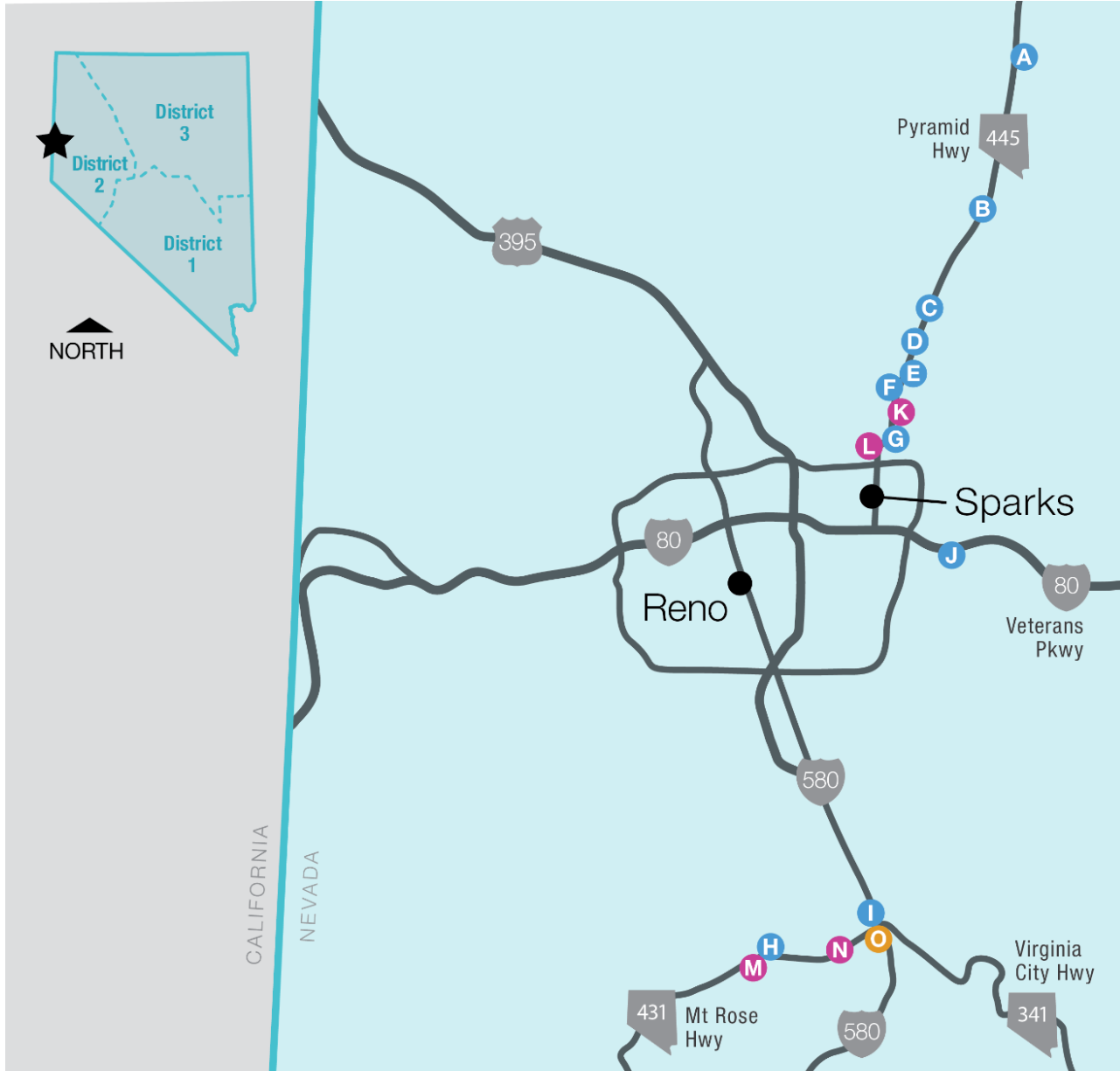
# ASWS CHANGES

**GOAL:** to develop a unified approach statewide that promotes uniformity and consistency in the treatment of ASWS specific to each intersection's individual needs. This will enhance the safety of the traveling public and **promote better driver behavior.**

- System modifications have been successfully completed in Carson, Douglas, and Las Vegas.
- Similar modifications in other states have shown a reduction in travel speeds which enhances safety.



# RENO-SPARKS AREA



## TRAFFIC SIGNAL REMAINS, ELIMINATE ADVANCE WARNING SIGN



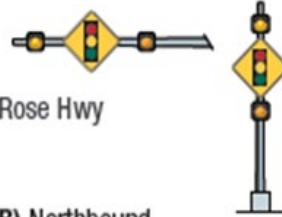
- A** (NB) SR-445 Pyramid Hwy / Calle De La Plata
- B** (NB/SB) SR-445 Pyramid Hwy / Eagle Canyon Dr / La Posada Dr
- C** (NB/SB) SR-445 Pyramid Hwy / Lazy Five Pkwy
- D** (NB/SB) SR-445 Pyramid Hwy / Sparks Blvd
- E** (NB/SB) SR-445 Pyramid Hwy / Golden View Dr
- F** (NB/SB) SR-445 Pyramid Hwy / Los Altos Pkwy
- G** (SB) SR-445 Pyramid Hwy / Disc Dr
- H** (WB) SR-431 Mt Rose Hwy / Thomas Creek Rd
- I** (SB) US-395A / SR-431 Mt Rose Hwy
- J** (NB) I-80 Veterans Pkwy / Greg St

## MODIFY TIMING



- K** (NB) SR-445 Pyramid Hwy / Disc Dr
- L** (SB) SR-445 Pyramid Hwy / Farr Ln / Queen Way
- M** (EB) SR-431 Mt Rose Hwy / Thomas Creek Rd
- N** (EB) SR-431 Mt Rose Hwy / Wedge Pkwy

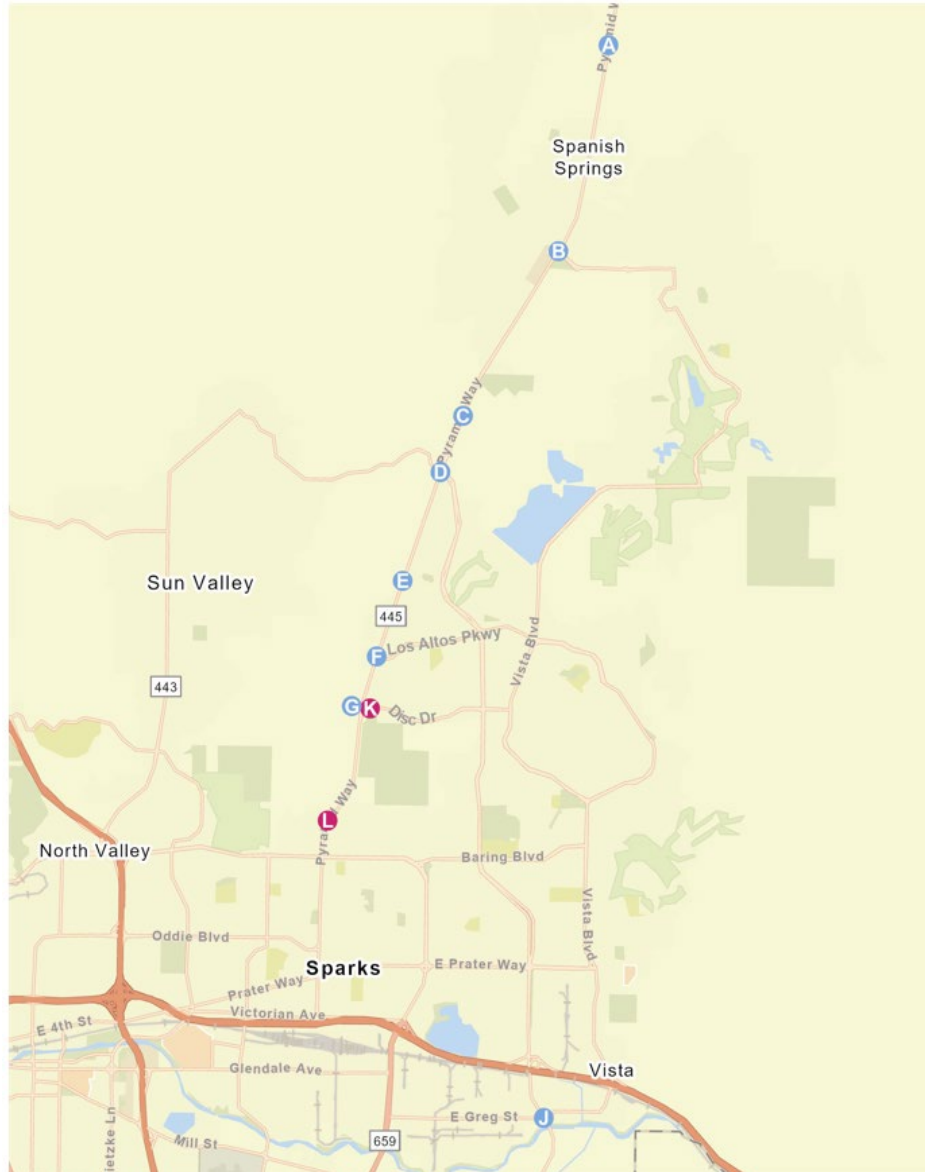
## CONVERT TO PASSIVE



- O** (NB) US-395A / SR-431 Mt Rose Hwy

(SB) Southbound      (NB) Northbound  
(EB) Eastbound      (WB) Westbound

# SPARKS AREA



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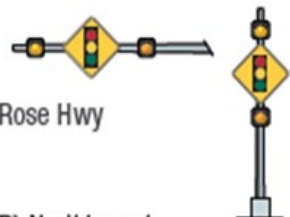
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# RENO AREA



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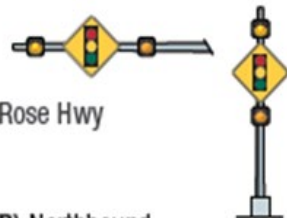
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## SCHEDULE

2019



**ASWS Guidance  
Study, Engineering,  
& Outreach Started**

Spring/  
Summer  
2022



**Construction Begins**

Late  
2022



**Construction  
Complete**

Continuing



**Continued outreach  
and engineering  
review of ASWS**

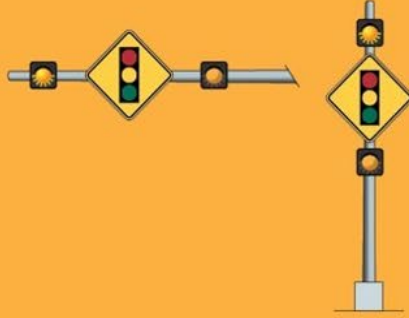

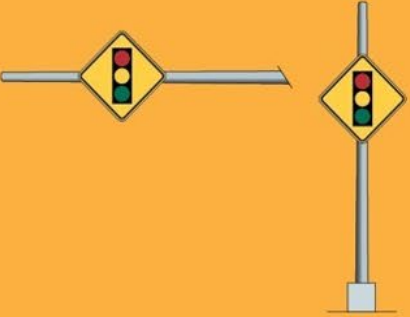


## Construction complete

- ✓ Northern Nevada NDOT District 2 SOUTH:  
Carson City and Douglas County
- ✓ NDOT District 1: Clark County/Las Vegas Area
- ✓ NDOT District 3: Northeastern Nevada/Elko Area

## Construction scheduled to begin in Spring/Summer 2022

- Northern Nevada NDOT District 2 NORTH:  
Washoe County

# DECOMMISSIONING PLAN STAGES

STAGE 1	STAGE 2	STAGE 3
<p>Advanced Notification</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; background-color: #333; color: white; width: 40%;">CHANGE IN SIGNAL OPERATION AHEAD*</div> <div style="border: 1px solid black; padding: 5px; background-color: #333; color: white; width: 40%;">FLASHING BEACONS UNDER STUDY FOR REMOVAL*</div> </div> <div style="text-align: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; background-color: #333; color: white; width: 60%; margin: 0 auto;">FOR FURTHER INFO CONTACT NDOT XXX-XXX-XXXX*</div> <p style="font-size: small; margin-top: 5px;">*Subject to change</p> </div>	<p>Place ASWS in passive mode &amp; replace sign</p> 	<p>Transition period to allow the motorist to observe the change in traffic pattern ahead</p>  <p style="text-align: center;">Community Transition Period</p>
STAGE 4	STAGE 5	STAGE 6
<p>Remove flashing beacons</p> 	<p>Transition period to allow the motorist to observe the change in traffic pattern ahead</p>  <p style="text-align: center;">Community Transition Period</p>	<p>Final system removal, removal of all poles and conductors</p> 



University of Nevada, Reno

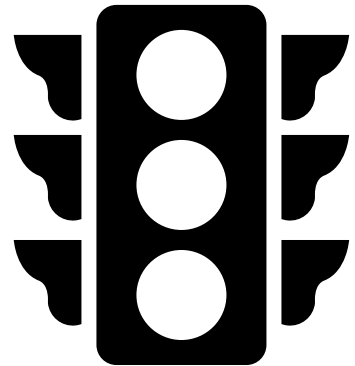
- UNR'S use of **LiDAR** (Light Detecting And Ranging) was completed in December of 2020 and prepared by the UNR Center for Advanced Transportation Education and Research
- The Intersection Traffic Study with LiDAR at Pyramid and Los Altos Pkwy was prepared for the Regional Transportation Commission (RTC), Washoe.

## **Methodology**

- 7 speed-study zones for each southbound lane

## **Conclusion**

- When both the ASWS signal and traffic light were clearly visible, **most** vehicles sped up by a few miles per hour after the ASWS signal was activated



After decommissioning was carried out in Carson City, Douglas County, and Las Vegas, **no crashes have been recorded by our road operations center.**





## Comment Card

- Available at the meeting tonight
- Provide completed card to NDOT staff



**Hotline:** 775.888.7000



**Email:** [info@dot.nv.gov](mailto:info@dot.nv.gov)



## Website

- NVsafesignals.com

Click Questions/Contact Us (at the bottom of the page)



Select Project Feedback Only



Select Project: Advance Signal Warning System



**THANK YOU**