



Commercial Vehicle Services

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Secretary of Transportation

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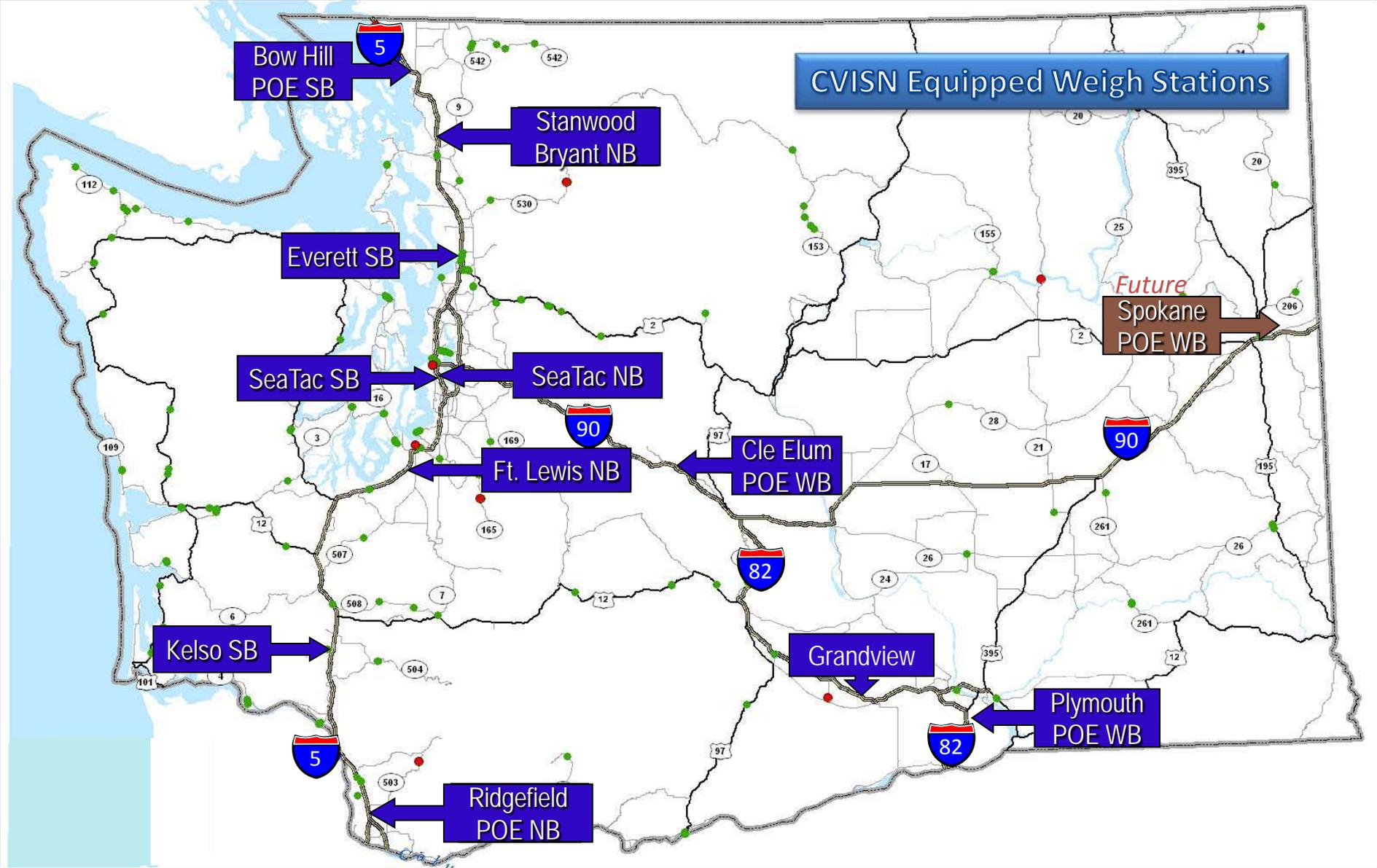
Anne Ford

Commercial Vehicle Services Administrator

Discussion Focus:

- Weigh-in-motion
- Automated License Plate Readers
- Infrared Roadside Screening







Using Weigh-In-Motion (WIM), Automatic Vehicle Identification (AVI) and Automated License Plate Reader (ALPR) we can electronically screen all commercial vehicles on the mainline

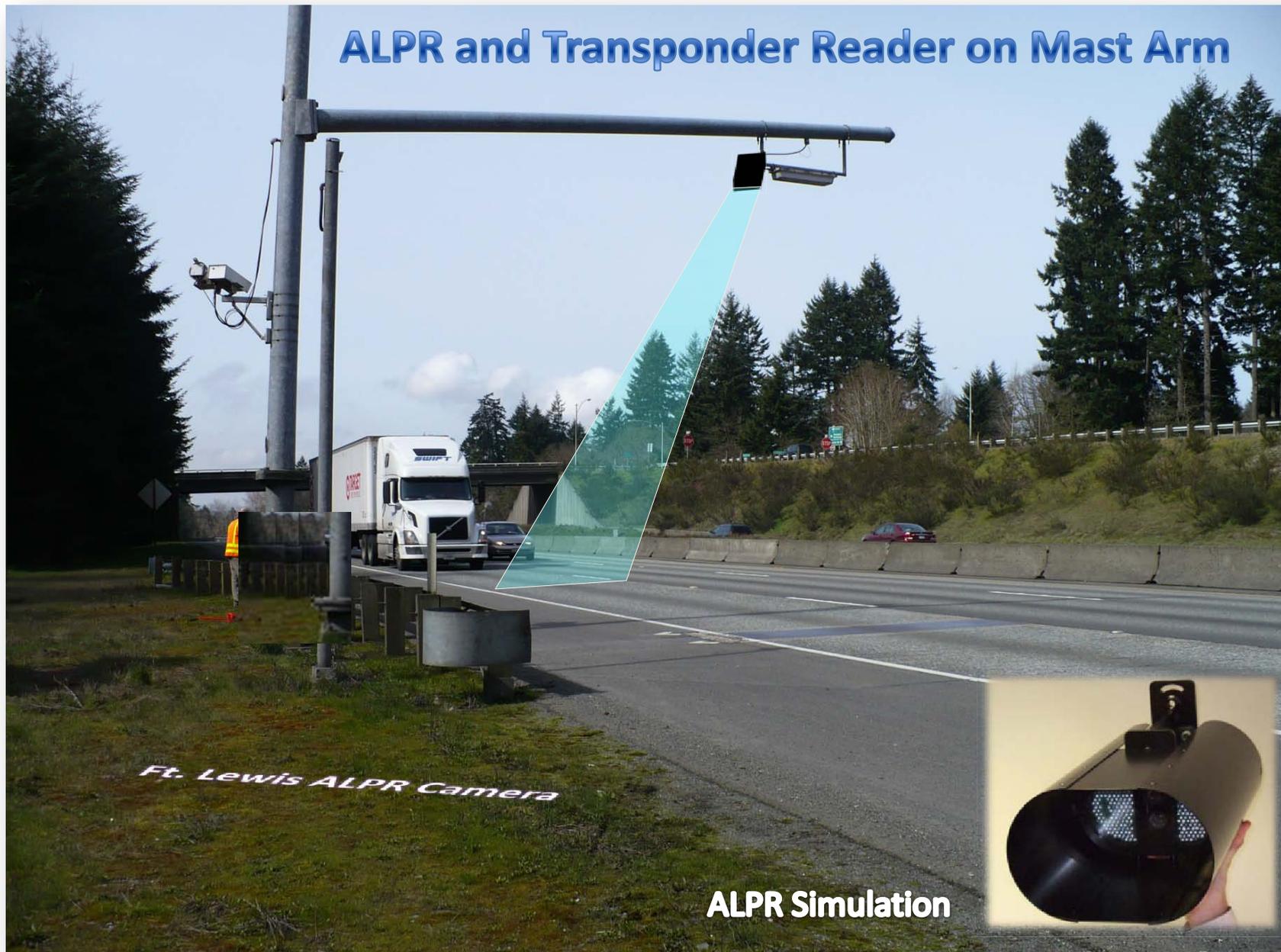
Electronic Screening - How does it Work?

- WIM scales are imbedded in the roadway about one half mile ahead of the weigh station.
- AVI uses transponder serial numbers to uniquely identify a vehicle record in database.
- ALPR reads license plates and uses this to identify a vehicle record in database.
- Provides the ability to query a database and screen the data associated with that vehicle.





ALPR and Transponder Reader on Mast Arm



Ft. Lewis ALPR Camera

ALPR Simulation



Outcome Of The Process – What The WSP Officer Actually Sees

Commercial Vehicle Screening List -- Fort Lewis NB - DWS, Weighstation #7 -- STATION OPEN

File View Vehicle Static Scale Settings Reports Tools Station Status Help

Station Open Station Closed — Non-Transpondered Control 521801 - 521731 — Transpondered Control

Lane: ALT VIEW 2 Screening: Over English Height On On Sorting Mode Sorting Random Pullin % 40 Threshold % 100 Sorting Mode Sorting Random Pullin % 5 Threshold % 100 Modify...

	52242-1 09:16:40 Lane: MAINLINE 1 53 mph 74.2 ft	10.7 8.8 8.0 7.7 8.5 43.7 o===17===o==4==o=====33=====o==4==o 59 Plate 'IN-1008252' Not in Database	Hold Print More...	Good Vehicle
	52265-1 09:16:40 Lane: MAINLINE 2 44 mph 66.9 ft	10.3 6.3 5.7 5.7 5.7 33.6 o===15===o==4==o=====29=====o==4==o 52.4 RSC EQUIPMENT RENTAL INC 80000 Exp. 12/31/10 WA B33065C	Hold Print More...	Good Vehicle
	52264-1 09:16:39 Lane: MAINLINE 1 45 mph 71.7 ft Tag: 20886679	9.7 7.4 16.1 15.3 16.0 14.4 12.1 91.0 o===14===o==5==o==4==o=====31=====o==5==o==5==o 64.6 SB INC 105500 Exp. 12/31/10 OR YAFC833	Hold Print More...	Good Vehicle
	52255-1 09:16:35 Lane: MAINLINE 1 43 mph 71.9 ft	9.0 8.4 14.8 14.3 6.8 12.4 12.7 12.6 90.9 o===13===o==4==o==4==o=====23=====o==11==o==5==o==5==o 65.3 EDGMON TRUCKING LLC 105500 Exp. 05/09/10 WA B88618N	Hold Print More...	Good Vehicle
	52235-1 09:16:25 Lane: MAINLINE 1 51 mph 65.8 ft	10.5 6.6 6.4 7.0 30.5 o===12===o==4==o=====37=====o 53.9 HCKM LLC 80000 Exp. 12/31/10 OR YAFC640	Hold Print More...	ISS Inspect

VMS Message: Display Scale 1 Lbs Static Scales on Lane WEST - Off

- (1) Ahead
- (2) Stop
- (3) Back up (2-30)
- (4) Proceed slowly 3 mph
- (5) Move to next axles
- (6) Park Bring All Paper (4-15)
- (7) Release Brakes
- (8) No Night Prking 3mph
- (9) Drop Axle Down
- (0)

0

1.	0.
2.	0.
3.	0.

Axle Detail: 53228-1 #Axles Weight Violations:

Static (lbs)	Axle	WIM (lbs)	Sep (ft)	A	T	Bridge
	1	9,272	14.5			
	2	11,854	35.7			
	3	7,590	4.1			
	4	8,093				
Totals		36,809	54.3			

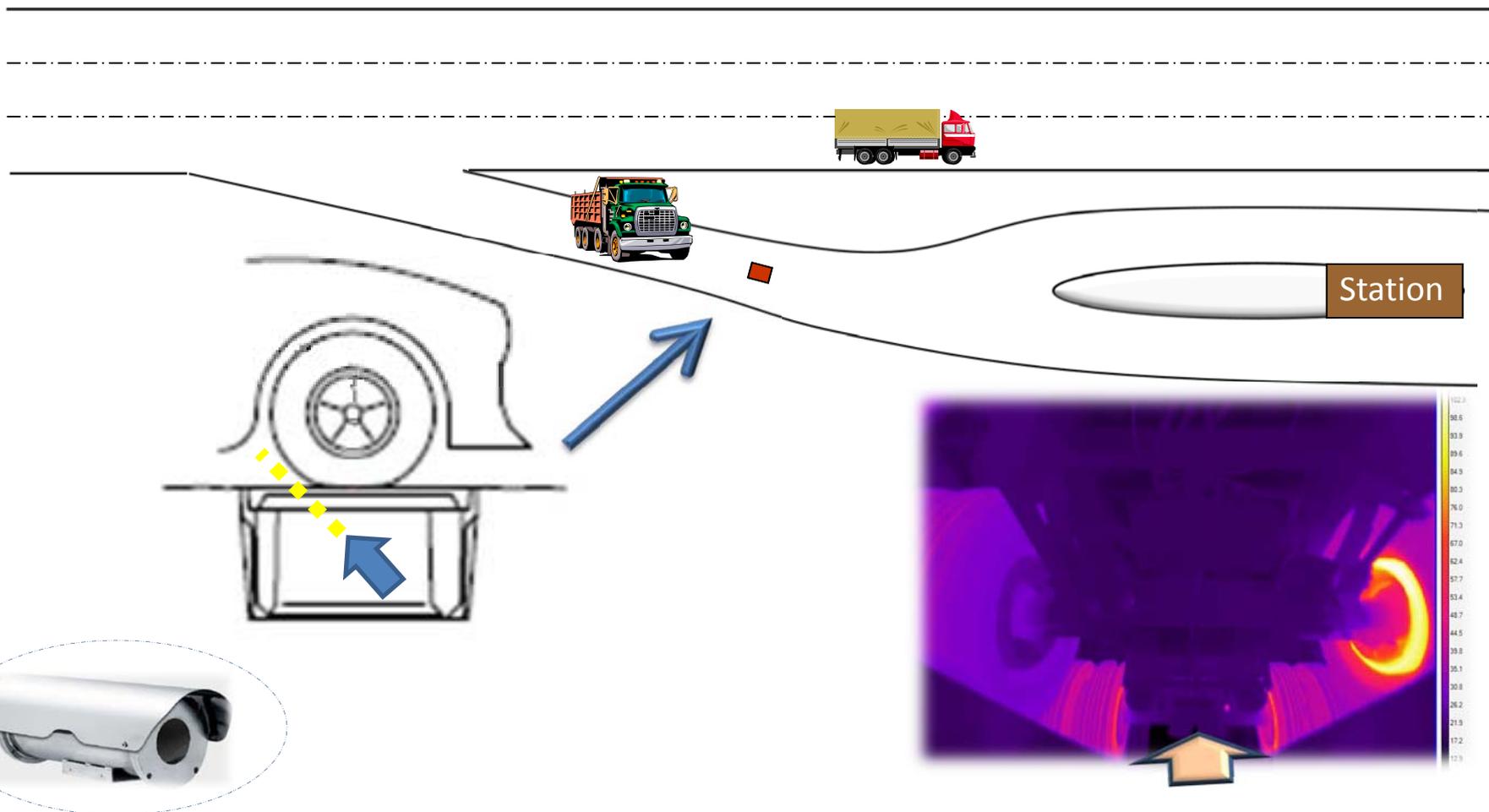


Automated Infrared Roadside Screening (AIRS) Project

- **Remove user** from tedious under vehicle inspection process
 - User is notified when a brake is out of defined temp range
 - User is provided visual details of where to look on vehicle
- **Scan every vehicle** entering the Station
 - No interruption of vehicles travel
 - Primary goal = cold (non-working) brakes

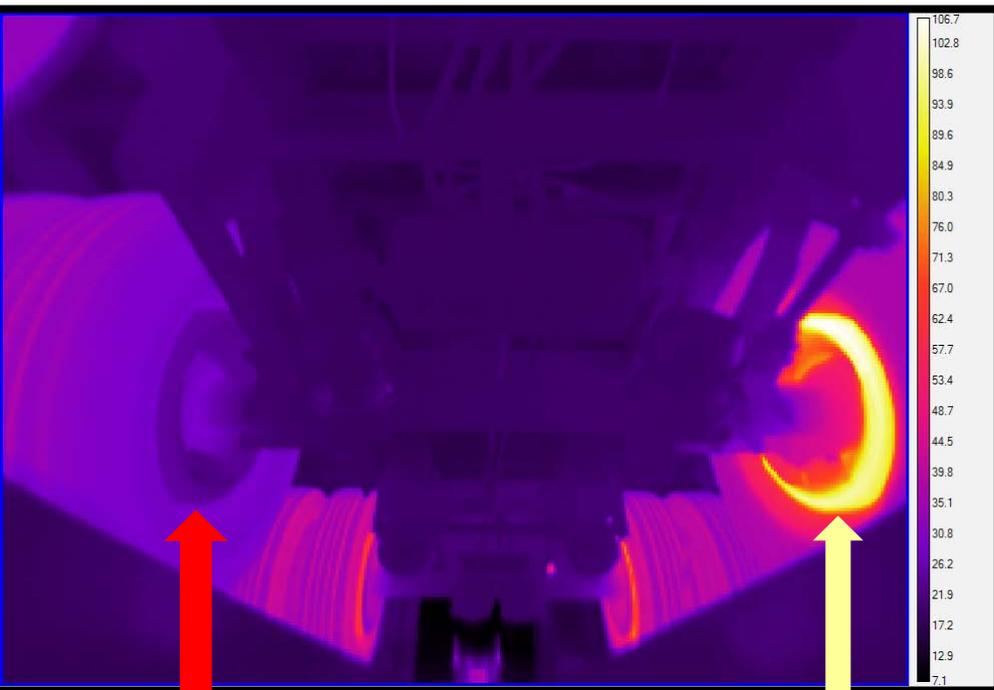
Fully Automated
Scan & Analysis

Based on WSDOT/WSP Feasibility Study Infrared (IR) Thermography Camera Location



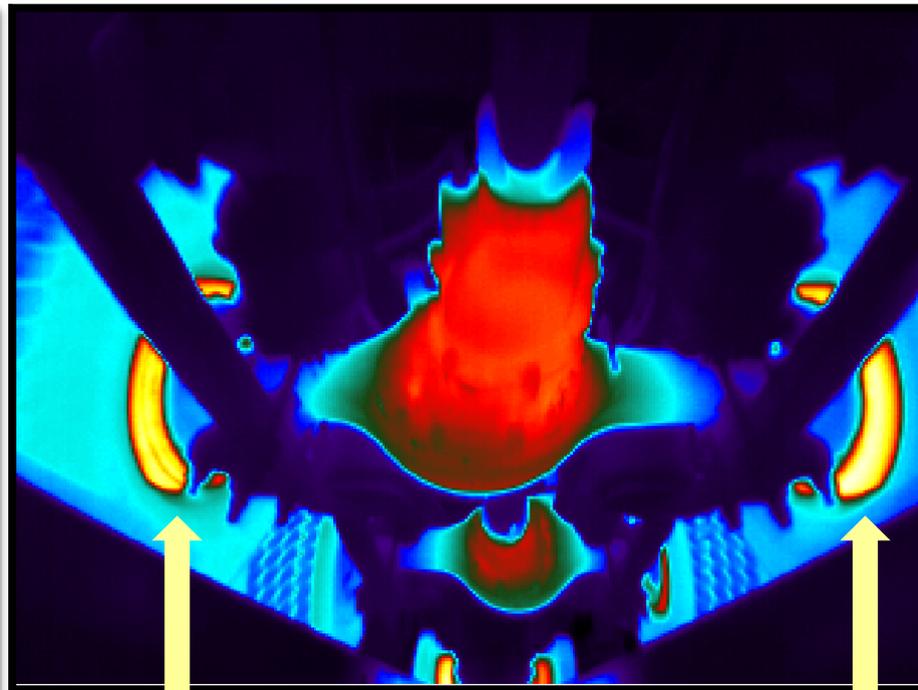
Embedded in center of ramp

Requires 1 infrared thermography camera – gives unobstructed views



Underside of a truck

**Nonfunctional
(cold) brake**



Underside of a truck

Functional (warm) brakes showing heat