

ADOT Project Delivery Academy

District Operations

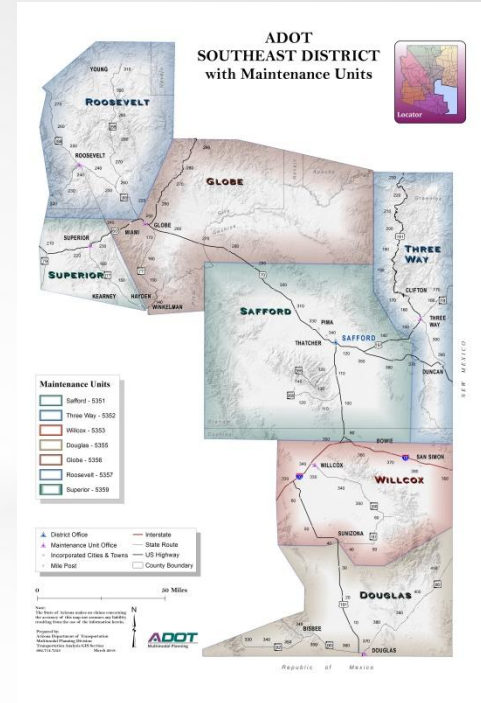
Considerations in Rural Districts

Presentation by Kurt Harris, Assistant District
Engineer Southeast District

June 16, 2021

Southeast District Overview

- Serves portions of six counties
- 14 incorporated communities
- Resident population 200,000
- Highest route SR366; lowest SR88
- 22 routes for 1,028 centerline miles
- 3 construction and 7 maintenance units



Southeast District Overview

- What are the largest and smallest incorporated communities in the Southeast District?

Largest and smallest cities in the District?

- Douglas at 17,000 and Winkelman at 310

Issues in Rural Districts

- ADOT = big fish in small fish bowl
- LPA Projects = lots of hand holding
- Federal Aid = love – hate affair
- Residents = long memories



Issues in Rural Districts

- Sensitive species

Mt. Graham Red Squirrel
(Scientific Name: Goodluckus Findingone)



Issues in Rural Districts

- Invasive species

Upper Sonoran Chupacabra
Use appropriate avoidance mitigations



Engineering Trivia!

- What is a miner's inch?

What is a miner's inch?

- Flow measure used by miners in the late 19th century
- Definition varies by jurisdiction**
- Water passing through a hole under a certain pressure
- “Inch” actually refers to square inches of the hole
- Adopted by irrigation districts for agriculture
- Equivalent to 1/40th CFS or 11.22 GPM in Arizona

**** Whiskey is for drinking and water is for fighting!**

Construction Issues

- Long-term per diem
- CE costs and mobilization
- Windshield time
- Small staff does everything
- Consultants needed; good consultants preferred
- Slower traffic isn't necessarily safer traffic



Maintenance & Operations Issues

- Routine maintenance
- Incident response



Maintenance & Operations Issues

- No, I can't raise the speed limit
- No, I can't pave your driveway
- No, I can't give you my old guardrail
- No, I can't clean out your wash
- ...but I'll be there 24-7-365 for the fires, floods, bomb threats, and blizzards



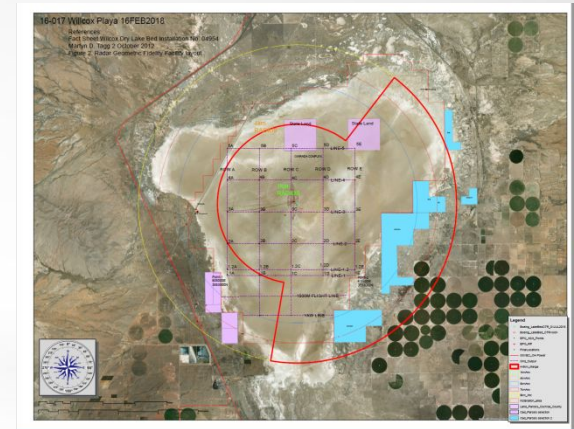
Rural Multimodal Transportation?



Past



Present



Future

Please Remember!

- Custodians of old infrastructure
- Invite maintenance to weekly construction progress meetings; walk the job 6 weeks before punch list day!
- One chance to get it right





Why Do We Whistle Before Entering Culverts?

Rules of Thumb 🤗

- Cell phones have cameras and can record conversations
- Don't make promises you can't keep; keep the promises you make
- Trust and respect are earned
- The most challenging part of the 5-year plan is the 15 years before
- Public service – the hardest job you'll ever love

Arizona Management System

- Continuous improvement becoming normal
- District metrics?
 - Construction focuses on costs and deliver
 - Maintenance focuses on safety and preservation
- Success factors
 - Humility of the Gemba
 - Patience and appreciation

Guess Where!



Questions?



Susanna Costner, c. 1920, Swift Trail

Thanks and Good Luck!

