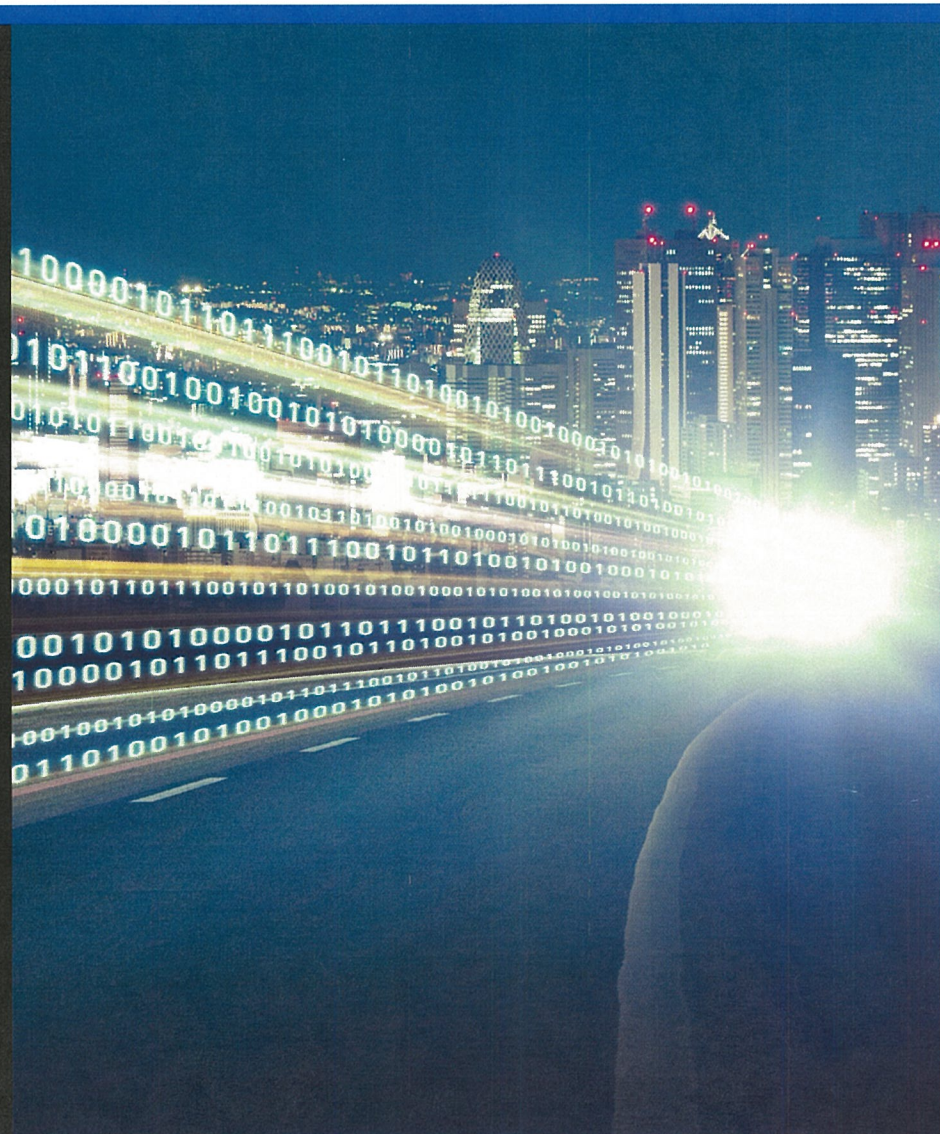


New Mexico DEPARTMENT OF  
**TRANSPORTATION**  
MOBILITY FOR EVERYONE

# NMDOT FIBER AND DATA INFRASTRUCTURE OPERATION

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## GOAL

# ESTABLISH AN INTEGRATED TRANSPORTATION NETWORK WITH CONTIGUOUS MULTIMODAL & FACILITY CONNECTIVITY

## Current Needs

### Intelligent Transportation

- Road Cameras
- Digital Message Signs
- Traffic Signals and Counters
- Weigh Stations

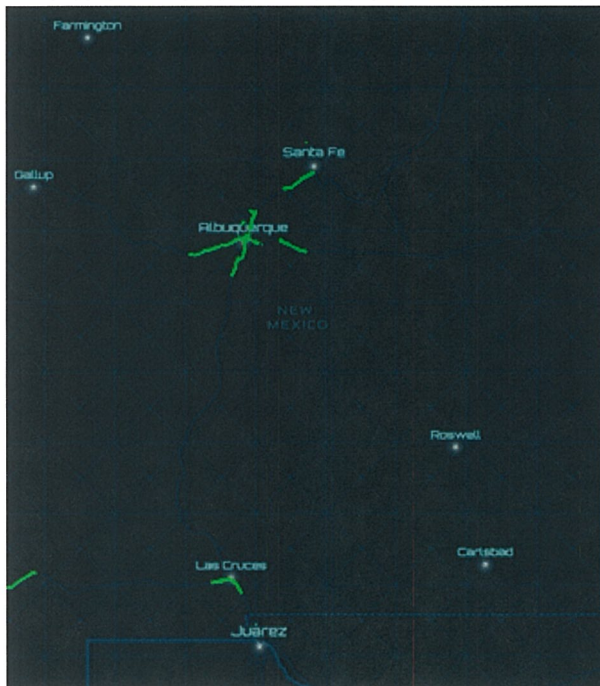
### NMDOT Facility Connectivity

- 100+ NMDOT facilities – Insufficient bandwidth to interact with intelligent transportation systems
- Redundancy and Disaster Recovery
- Reduction in connectivity cost (POE connectivity alone costs over \$1.2 million annually)

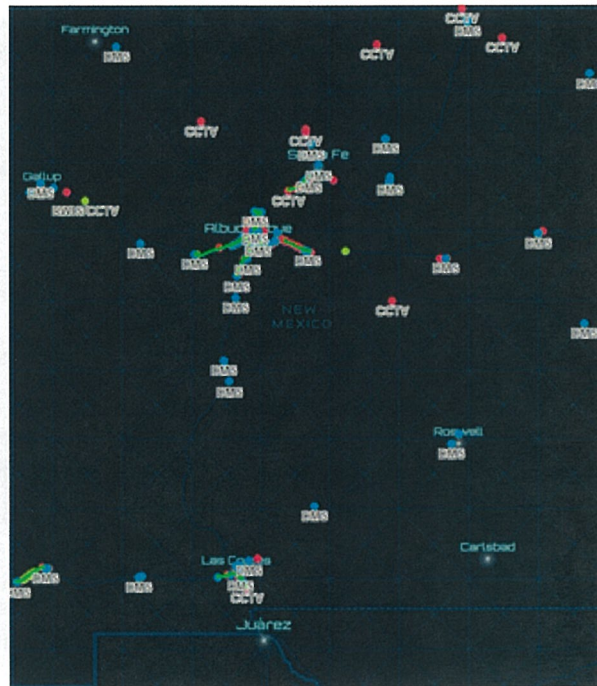
## Future Needs & Innovative Transportation Delivery

- One-way detection and warning systems
- Message boards and real time dispatch
- Road condition sensors
- Guard rail collision detections
- Interactive lighting
- Electric priority lanes for EV charging
- Autonomous vehicle and smart road connectivity

## EXISTING NMDOT FIBER NETWORK



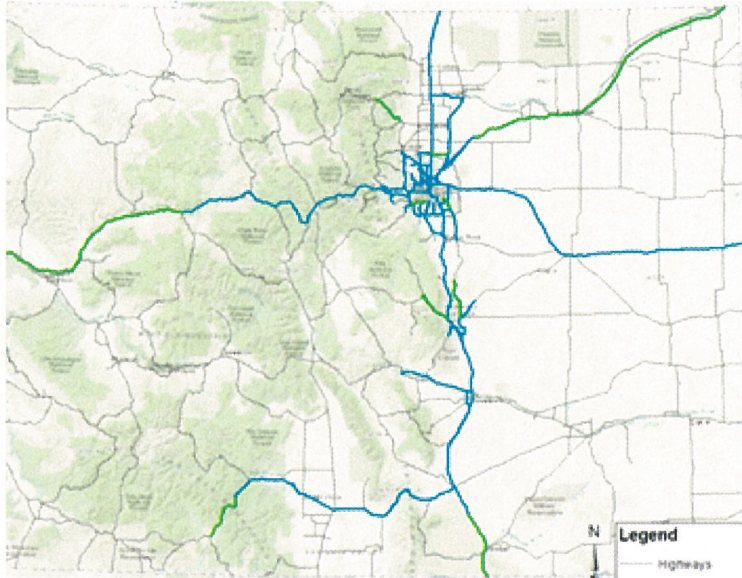
## EXISTING ITS ASSETS



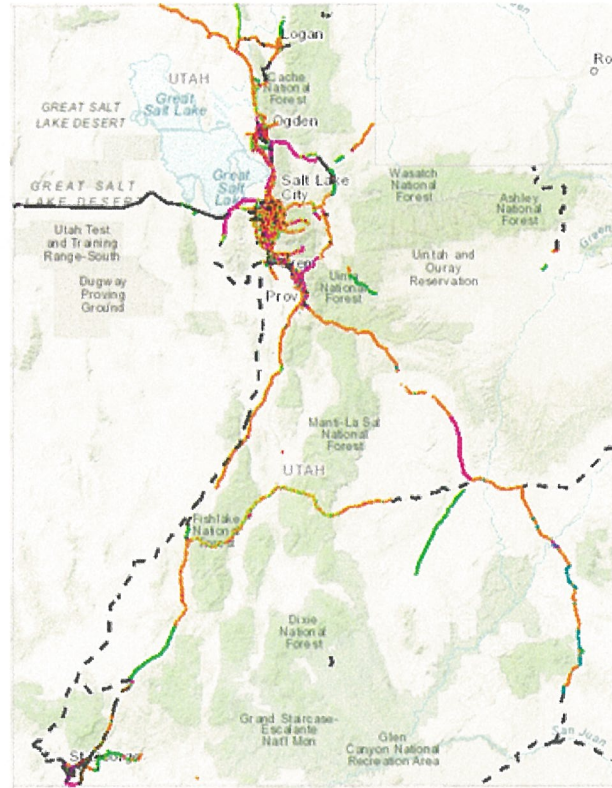
## ACQUISITION SOURCES FOR NETWORK CONNECTIVITY ASSETS

- **STAND ALONE DATA INFRASTRUCTURE PROJECTS**
- **INTEGRATED ROAD CONSTRUCTION PROJECTS**
- **INDUSTRY TRADE FOR RIGHT-OF-WAY ACCESS**

# INDUSTRY TRADE EXAMPLES

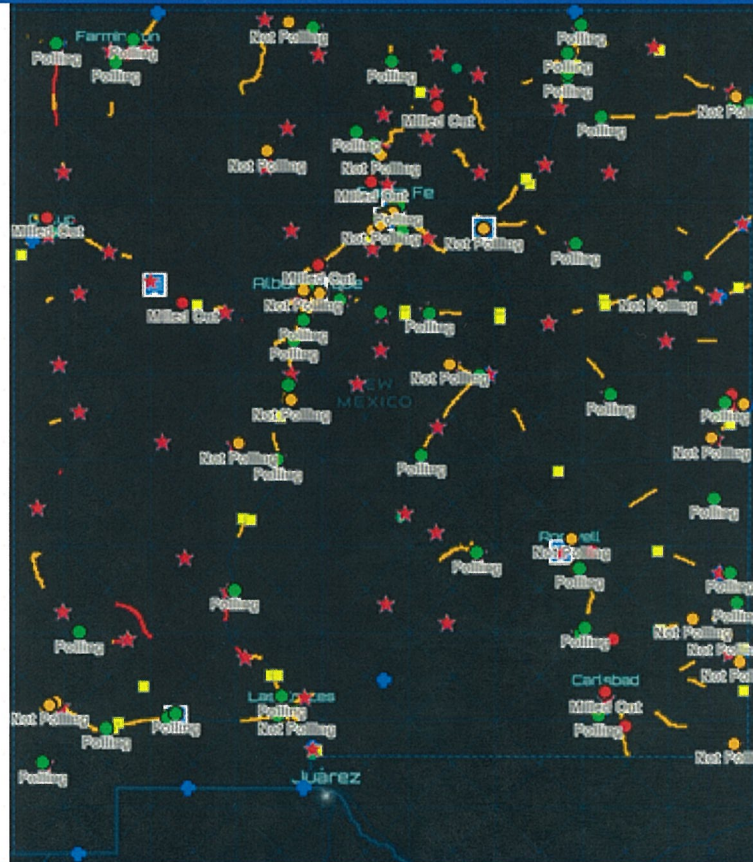


## CDOT FIBER NETWORK

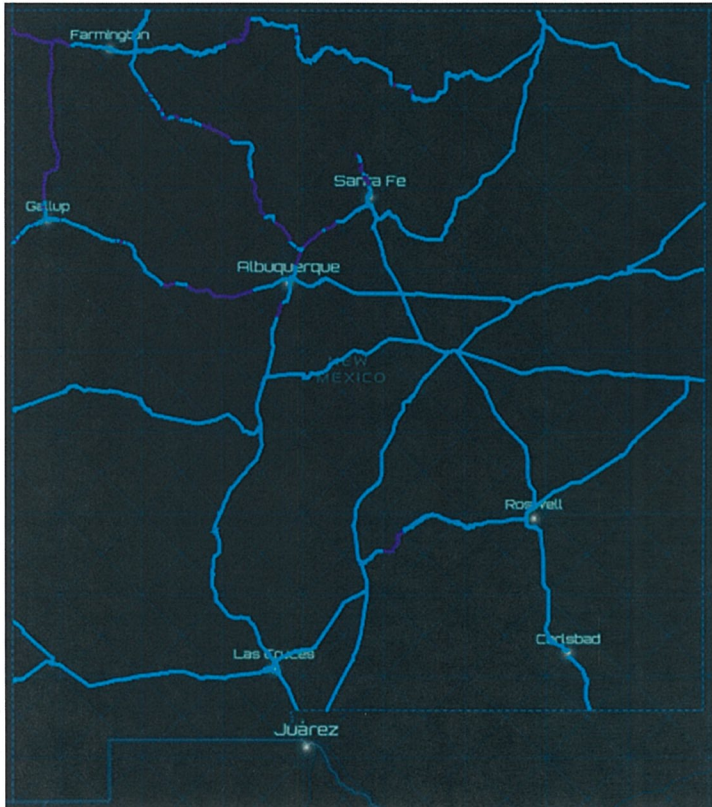


## UDOT FIBER NETWORK

# EXISTING NMDOT FACILITIES



# DESIRED NMDOT NETWORK

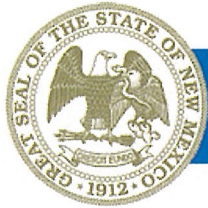


Build Scenario	Miles of New Plant	Construction Scenario 1: Small Bank (2-2" Conduits)	
		Low Cost Estimate	High Cost Estimate
ABQ to SFE	40	\$3.8 million	\$7.6 million
Priority routes	1,368	\$132 million	\$268 million
Additional routes	1,547	\$149 million	\$299 million
State sites in ABQ and SFE	242	\$17.6 million	\$31.8 million
State sites along priority routes	620	\$47.6 million	\$89.7 million
NMDOT patrol yards	27	\$2.5 million	\$4.8 million
<b>Total</b>	<b>3,844</b>	<b>\$354 million</b>	<b>\$702 million</b>

Description	Low Annual Cost	High Annual Cost
Fiber Maintenance	\$210,000	\$460,000
Fiber Locates and Fiber Repairs	\$360,000	\$360,000
Network Engineering	\$300,000	\$300,000
NOC Services	\$540,000	\$540,000
Network Maintenance Contracts	\$230,000	\$230,000
Network Replacement Fund	\$550,000	\$550,000
<b>Total</b>	<b>\$2.2 million</b>	<b>\$2.4 million</b>



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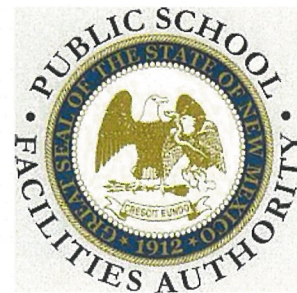


**EDD**

ECONOMIC  
DEVELOPMENT  
DEPARTMENT

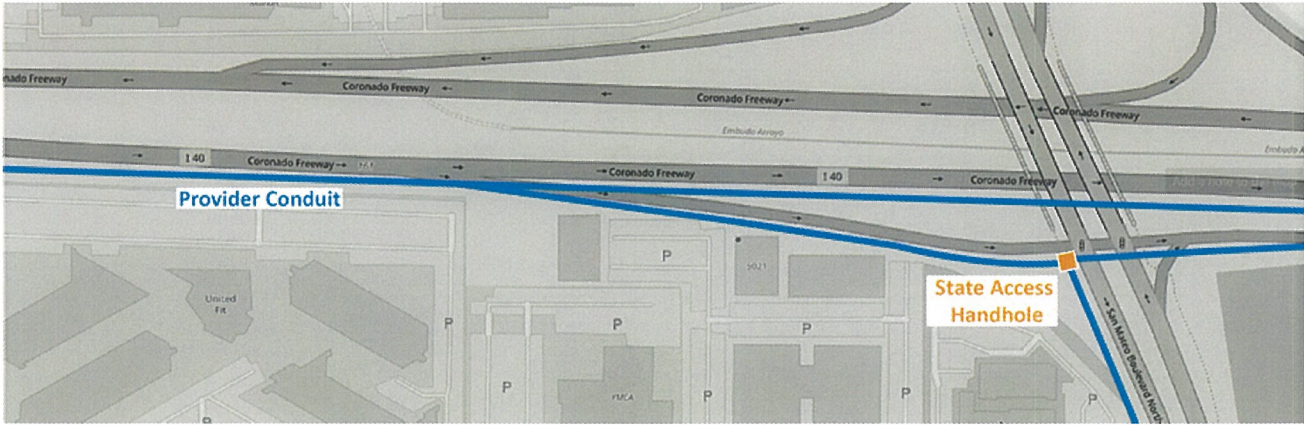
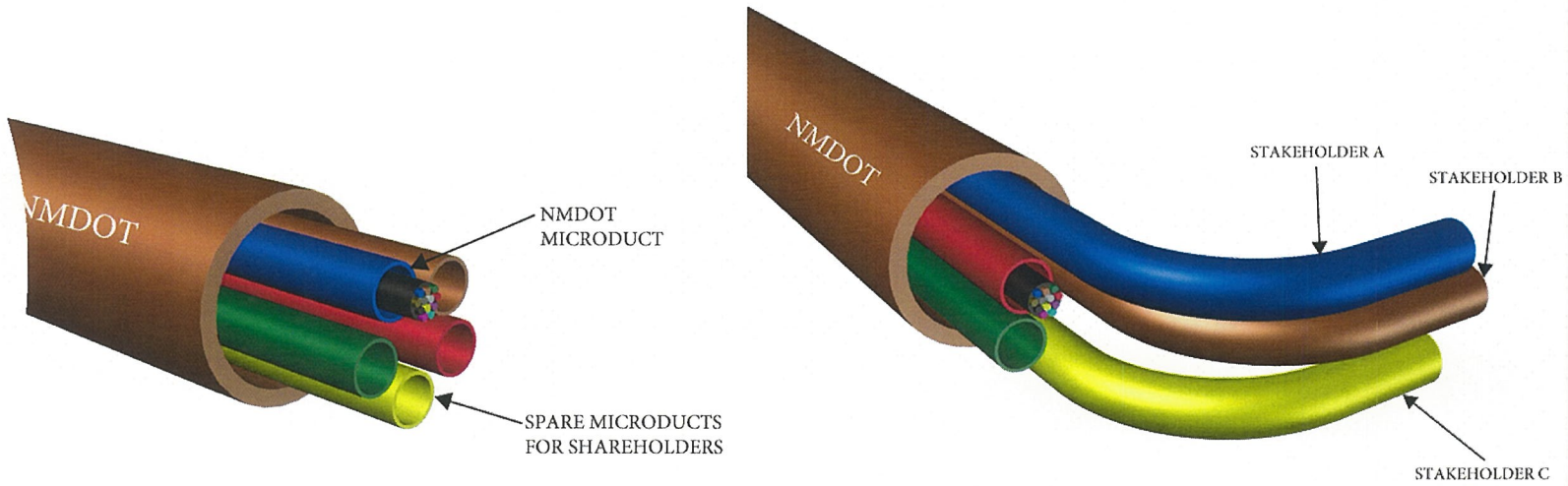


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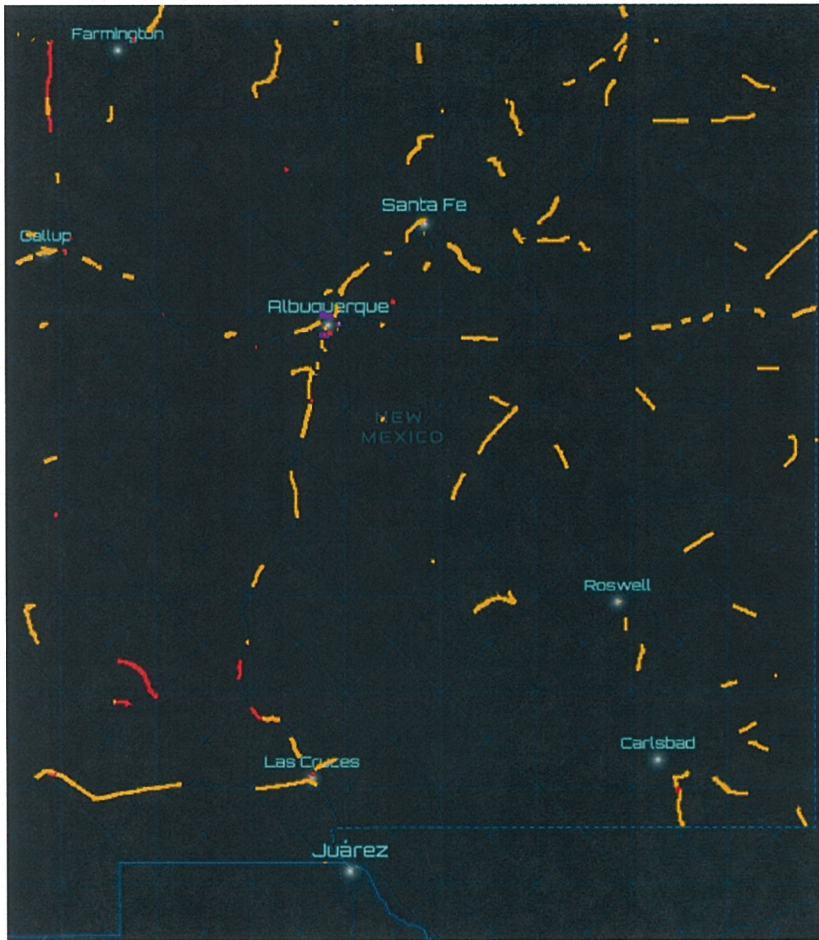
New Mexico  
Indian Affairs  
Department

**GOVERNMENT NETWORK  
COLLABORATION**



**GOVERNMENT NETWORK  
COLLABORATION**





# TRIBAL EDUCATION NETWORK - LA BAJADA ROAD CONSTRUCTION PROJECT

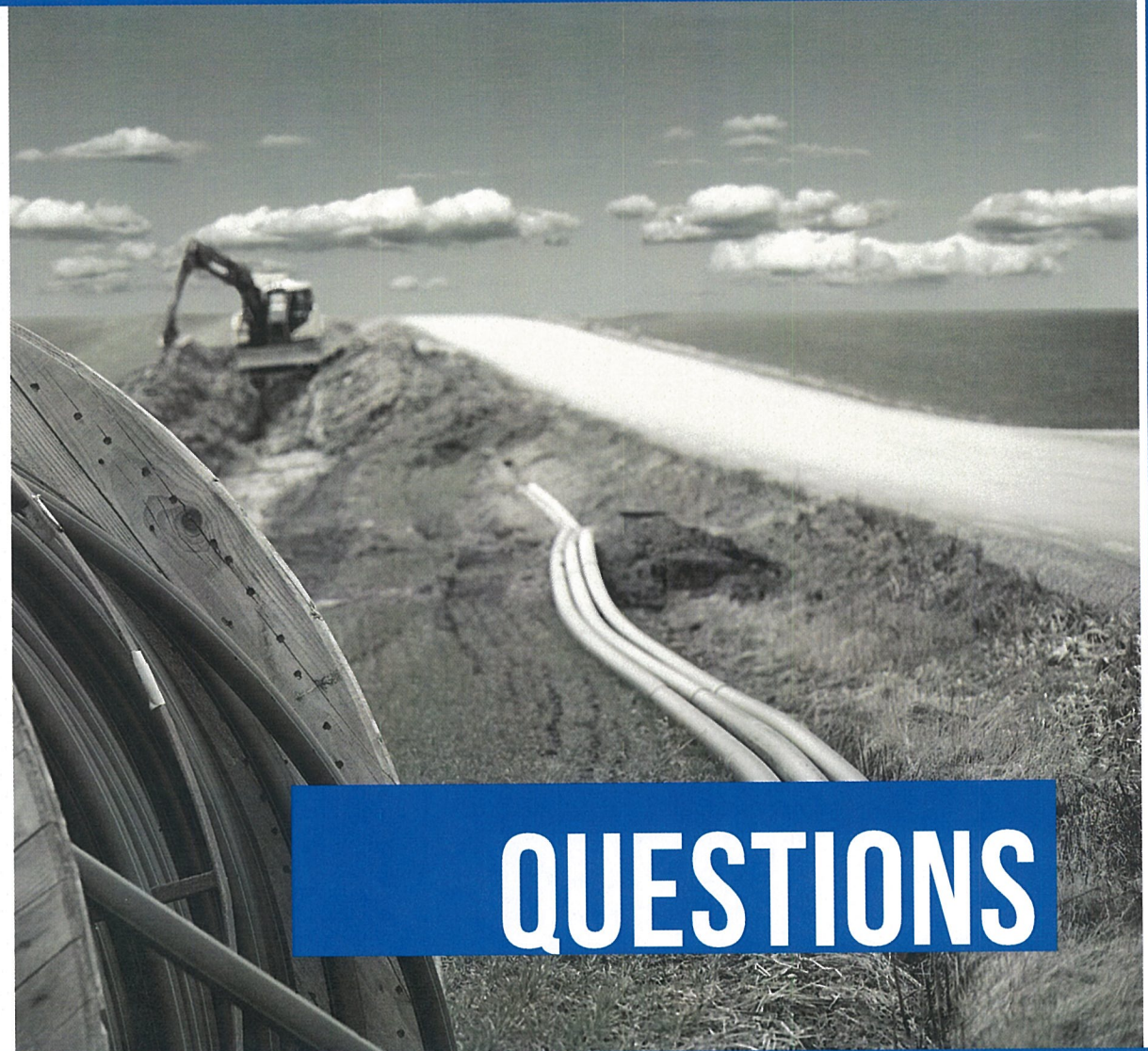
**ADACEN**

I-40 FIBER BUILDOUT

# SACRED WINDS - ROAD CONSTRUCTION PROJECT ASSESSMENT

HIGHWAY CONSTRUCTION PROJECTS

■ Thank you



**QUESTIONS**