

Strategic Transportation Investments Division Updates

TSITE Summer Meeting
July 30, 2021



Steve Allen
Director
Strategic Transportation Investments Division

Outline

- IMPROVE Act Update
- Executive Order 1
- State Industrial Access (SIA) Program Update
- Safety Update

IMPROVE Act Update

IMPROVE Act Update

1. IMPROVE Act – Overview and Reports Developed since 2017
2. IMPROVE Act Cost Estimates
3. Changes implemented since the IMPROVE Act passed
4. Some Unique IMPROVE Act Projects

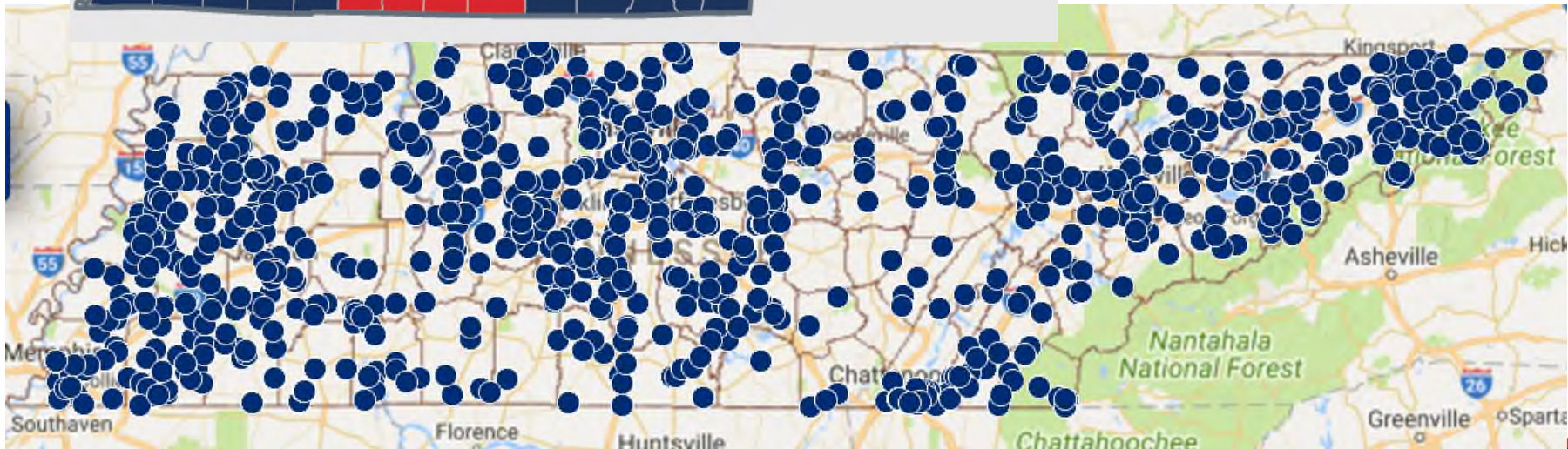
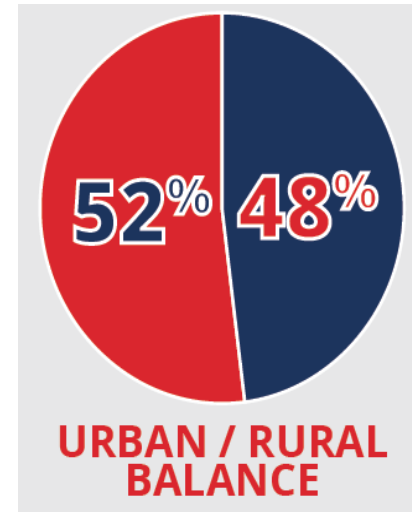
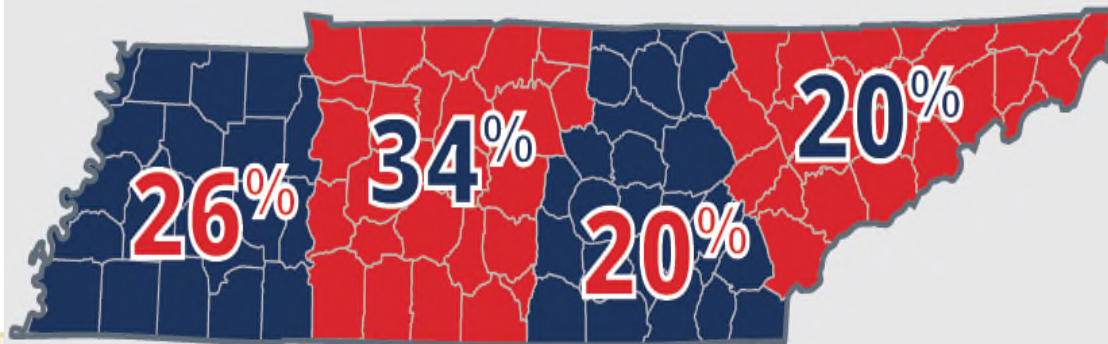
IMPROVE Act – Quick Facts

- Improving Manufacturing, Public Roads, Opportunities for a Vibrant Economy
- 962 Projects
- IMPROVE Act took effect July 1, 2017
- State's tax on gasoline was 21.4 cents per gallon in 2016
 - In 2017 – increased by 4 cents
 - In 2018 – increased by 1 cent
 - In 2019 – increased by 1 cent
 - 2020 – increased by _____?
 - 2021 – increased by _____?

Original Estimated Cost to Complete

- 962 projects totaling \$10,507,484,522

PROJECT BALANCE ACROSS THE STATE



Cost Estimates

- Currently we assume 5% per year for inflation
- Bridge TIRs – provide current year estimate and an inflated 5yr cost estimate
- Larger Projects (Tech Reports and IARs) – current year, 5yr, and 10yr inflated cost estimates

Original Estimated Cost to Complete

- \$10,507,484,522 – 2017
- Assuming 5% Inflation per year
- \$12,772,000,000 – 2021 (Rounded to Millionth)

Cost Comparison (Original and STID)

- Reviewed the cost estimates for 28 Tech Reports
 - Total Original IA Budget = \$1.2 Billion
 - Total Tech Report Estimate = \$1.9 Billion
- Already approximately \$700 Million over Budget
- 962 Total IA Projects

STID Cost Estimates

Project Location and Termini												
Location Information										Enter Begin L.M.		
Enter County ->	Route:		Project Begin (mi):									
	Country:		Project End (mi):		Enter End L.M.							
Enter PIN ->	Unit Prices:	Statewide										
	PIN:											
ROADWAY DESIGN												
INPUT ROAD SEGMENT CHARACTERISTICS												
PAVEMENT								TERRAIN		ROADSIDE DESIGN		
How Many Segments (1-30)?								1		Urban Only		
Segment	Begin (mi)	End (mi)	Pavement Design (ft)	Proposed Full Depth Pavement Width (ft)	Outside Shldr Width (ft)	Existing Pavement - If Widening	Replace Existing Full Depth Pavement?	Terrain Type	Widen to One Side or Both?	Rural/Urban	Curb and Gutter on one side or both?	5' Sidewalks
1												
Location Info Missing												
ADD MEDIAN												
How Many Segments (1-20)?										1		
Segment	Begin (mi)	End (mi)	Type	Inside Shldr. Width (ft)	Interior Width (ft)	Terrain Type						
1												
Pavement Removal			Concrete Islands			Terrain Assumptions			Shared Use Path			
AREA OF PAVEMENT REMOVAL (SF)			Total Concrete Island Area (SF)			Terrain Type			Length (mi)			
Asphalt:			SQFT:			Flat (1-3ft):	Cut/Fill Depth	Flat:	Grass Strip Width (ft)	Pav Width (8 - 12 ft)		
Concrete:						Rolling (4-7ft):	2.0	Rolling:				
						Mountainous (8-11ft):	6.0	Mountainous:				
						Heavy Mountainous (12-25ft):	9.0	Heavy Mountainous:				
							15.0					

STID Cost Estimates

DESCRIPTION	LOCAL	STATE	FEDERAL	TOTAL
	0%	0%	0%	
Construction Items				
Pavement Removal	\$0	\$0	\$0	\$572,400
Asphalt Paving	\$0	\$0	\$0	\$18,993,400
Concrete Pavement	\$0	\$0	\$0	\$0
Drainage	\$0	\$0	\$0	\$1,246,800
Appurtenances	\$0	\$0	\$0	\$3,572,200
Structures	\$0	\$0	\$0	\$31,691,700
Fencing	\$0	\$0	\$0	\$0
Signalization	\$0	\$0	\$0	\$0
Railroad Crossing or Separation	\$0	\$0	\$0	\$0
Earthwork	\$0	\$0	\$0	\$19,167,900
Clearing and Grubbing	\$0	\$0	\$0	\$0
Seeding & Sodding	\$0	\$0	\$0	\$161,100
Rip-Rap or Slope Protection	\$0	\$0	\$0	\$0
Guardrail	\$0	\$0	\$0	\$671,900
Signing	\$0	\$0	\$0	\$76,100
Pavement Markings	\$0	\$0	\$0	\$295,600
Maintenance of Traffic	\$0	\$0	\$0	\$701,300
Mobilization (5%)	\$0	\$0	\$0	\$3,857,500
Other Items = 10%	\$0	\$0	\$0	\$8,100,800
Const. Contingency = 10%	\$0	\$0	\$0	\$5,741,700
Construction Estimate	\$0	\$0	\$0	\$94,850,400
Interchanges & Unique Intersections				
Roundabouts	\$0	\$0	\$0	\$0
Interchanges	\$0	\$0	\$0	\$4,500,000
Right-of-Way & Utilities				
	LOCAL	STATE	FEDERAL	TOTAL
	0%	0%	0%	
Right-of-Way	\$0	\$0	\$0	\$1,145,700
Utilities	\$0	\$0	\$0	\$0
Preliminary & Construction Engineering and Inspection				
Prelim. Eng. 3%	\$0	\$0	\$0	\$3,014,900
Const. Eng. & Inspec. 10%	\$0	\$0	\$0	\$10,049,600
Total Project Cost	\$0	\$0	\$0	\$ 113,561,000

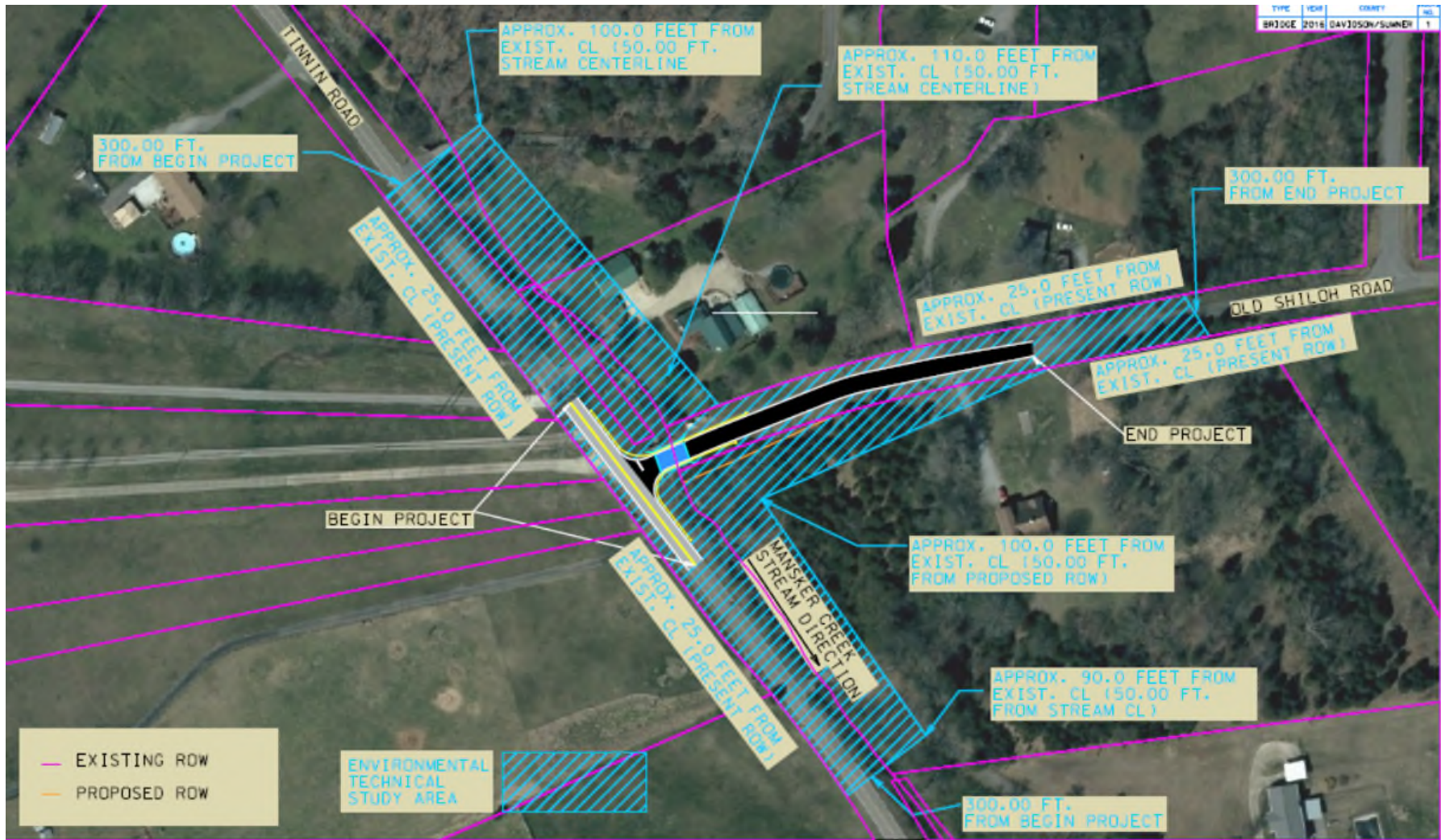
STID Progress with IA Projects

- Tech Reports and IARs (since 2017):
 - Completed: 35
 - Under Development: 28
 - Remaining Reports: 6
- Bridge TIRs (since 2017):
 - Completed: 109
 - Under Development: 24
 - Remaining Reports: Unknown (562 Total within IA)

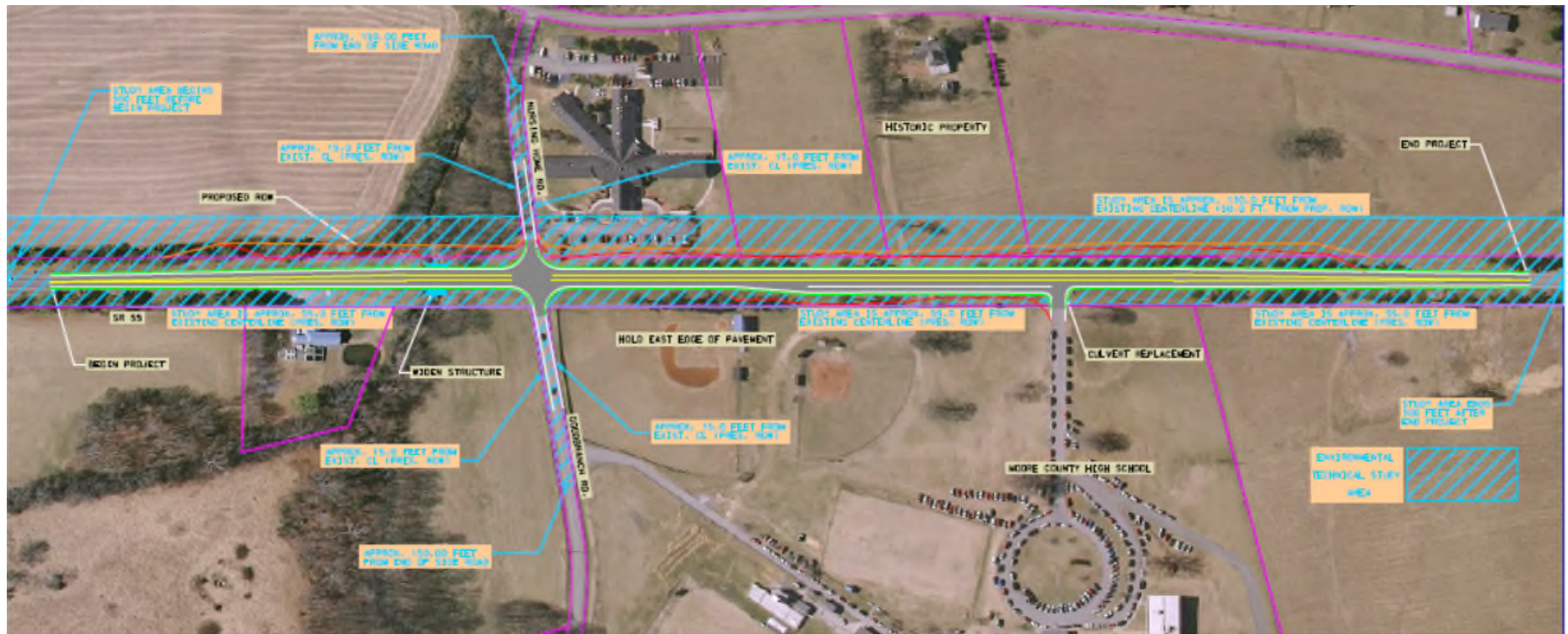
ETSA

- Environmental Technical Study Area
- Including for the following projects:
 - Bridge TIRs
 - Tech Reports
 - IARs
 - RSA's requiring design plans

ETSA



ETSA

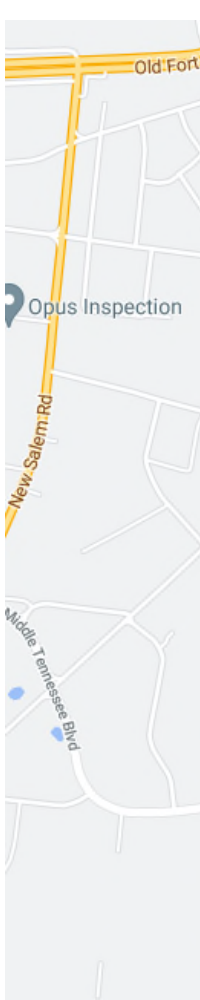


Other Improvements

- Improved coordination within TDOT and Local Officials
- Internal Project Tracking
- Additional Hires
- Higher percentage of in-house work
- Where we are going:
 - ORD
 - Vissim
 - HSM

Unique Projects

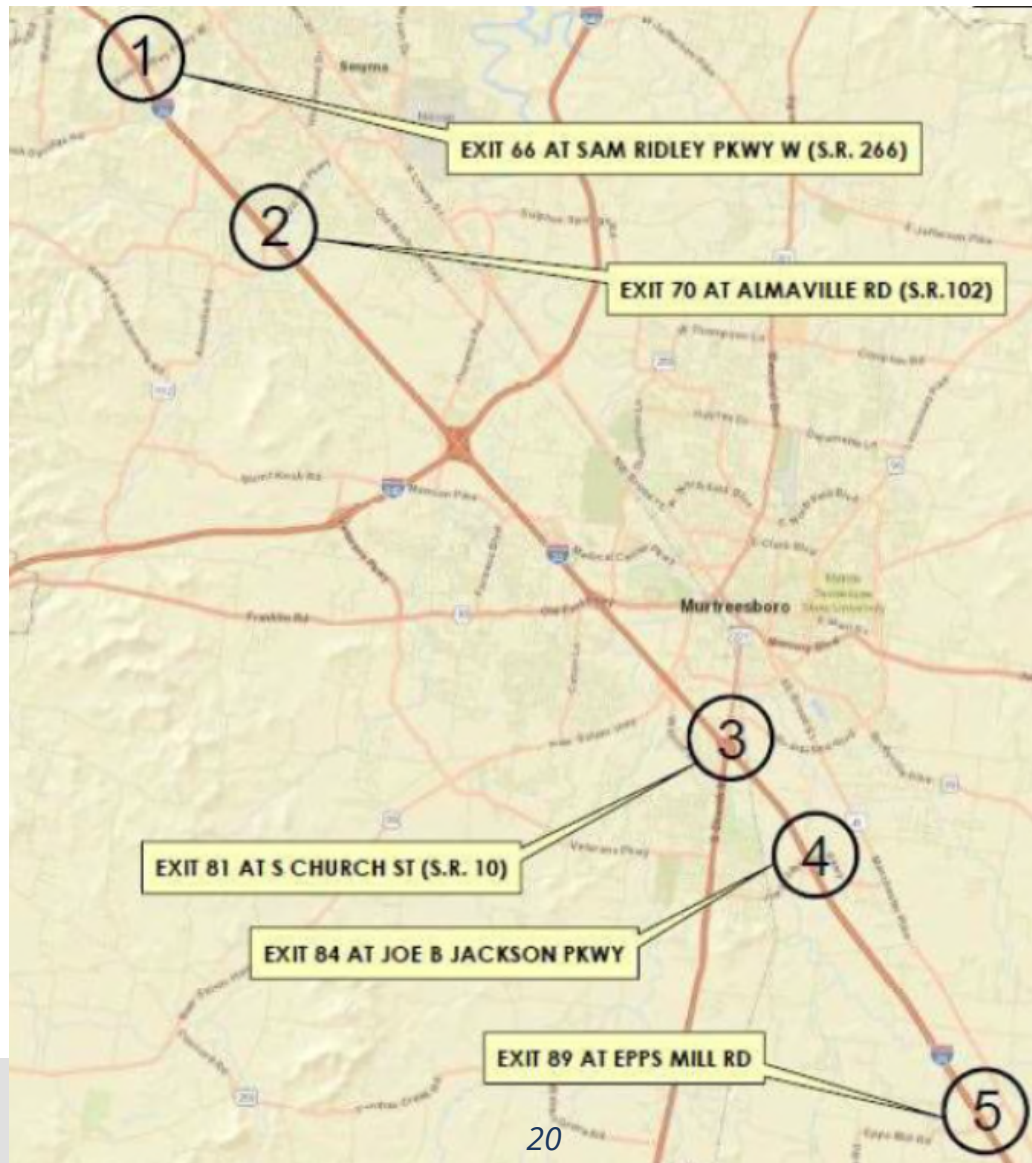
Rutherford SR-10 BTIR over CSX RR



Rutherford SR-10 BTIR over CSX RR



Rutherford 5-Interchange Tech Reports



I-24 Exit 66



I-24 Exit 66



Executive Order 1

Supporting Rural TN

Executive Order 1

- **Signed January 23, 2019**
- **Requires**
 - Statement of Rural Impact
 - Recommendations for Serving Rural Areas
- **Involves all Executive Branch Departments**
- **Governor's Priority**
 - TN is rapidly growing, but rural areas still have challenges

TDOT's Initiative

- **Commissioner Bright and staff traveled across the state**
 - Met with local officials from all counties to discuss concerns
- **Governor's Rural Opportunity Summit (August 2019)**
 - Commissioner Bright and Steve Allen attended



TDOT's Initiative (cont.)

- **STID compiled all items discussed**
 - Infrastructure improvements, maintenance activities, safety enhancements, and economic development opportunities
- **TDOT sent status updates to local officials on October 23, 2019**
- **By September 1, 2020, 75 requests had been completed for a total investment of \$55.8 million**

Evolving Process

Statewide Initiative

- **Rural Enterprise Management**

- State's avenue for facilitating enterprise-wide accountability for the Governor's priority of supporting rural TN

- **Rural Commissioners Group**

- Comprised of 12 state departments that meet quarterly



Rural Commissioner's Group

- **Four Objectives**
 - Reducing Programmatic redundancy
 - Increasing cross-department and federal collaboration
 - Enhancing and creating new ways of assisting communities through innovation and disruption
 - Partnering with communities to enhance state and local alignment
- **Main goal is to increase coordination and improve efficiency**

Statewide Initiative (cont.)

- **Rural Assessment Dashboard**

- Shows tracked priority projects and investments
- Currently only viewable by State Employees, but is expected to be Public Fall of 2021

Rural Assessment Dashboard

**Please Note: You will need to be connected to either the state network or to JVPN in order to view the below dashboard.*

Rural Assessment Dashboard Total Action Steps: 486
Total Investment: \$191,829,476.60

County: (All) Agency: (All)

Complete On-Track Off-Track Concern At-Risk Not Started

Project	County	Agency	Last Completed Action	Investment Overall
Partner with the Tennessee Forestry Association to implement a targeted outreach program for forest landowners and facilitate demon...	Bledsoe	Agriculture	COVID-19 is hampering moving forward. We are in discussion...	On-Track
Meet with Aviagen to get local grain producers prepared to supply grain to Aviagen's new poultry feed mill.	Bledsoe	Agriculture	Conducted webinar with grain producers within 100 mile radi...	Complete
Partner with the Tennessee Forestry Association to implement a targeted outreach program for forest landowners and facilitate demon...	Cooke	Agriculture	COVID-19 is hampering moving forward. We are in discussion...	On-Track
Identify opportunities and businesses for agriculture investments and expansions through AEF with Business Development Consultants.	Cooke	Agriculture	1 million dollars has been allocated for AEF funding for u...	On-Track
Increase engagement with Alvin C. York Institute to investigate expansion	Franklin	Agriculture	Pending discussion with THEC &	Off-Track

Rural Assessment Dashboard

- **FY21 updates**
 - 12 agencies currently working on 503 projects
 - Spread out among 11 distressed and 4 at-risk communities
 - \$201,022,742 has been invested in action steps to date
 - 67 projects are Complete, and 393 projects are On-Track
 - 7 projects are at-risk of not being completed
 - 10 projects are off-track
 - 12 projects have concerns
 - 14 projects have not been started

TDOT's Action Items

- **TDOT FY 21 Updates**
 - 19 projects are On-Track
 - 1 project is off-track
 - 11 projects have concerns
 - 4 projects have not been started
- **Reasons for Concern**
 - Lack of funding
 - Environmental concerns

Moving Forward

- **Governor's Quarterly Rural Newsletter**
- **Community Action Items for FY 22**
 - Updated County Designations
 - 20 total projects
- **Coordination with local officials yearly**

State Industrial Access (SIA) Program Update

SIA Program

- **Assists in providing connections for new or upgrading industries**
- **Typically allotted \$30 million per year**
- **Utilizes a Cost/Benefit Ratio to determine eligibility**
 - Includes factors such as capital investment, annual payroll, and jobs created

Project Timeline

- **At candidate phase, STID turns around a concept and cost within 2 weeks**
 - Missing data such as forecasted traffic, region input, or others could delay our delivery
- **From project approval to letting is approximately 28 months**
- **Construction takes approximately 12-18 months**

Current Projects

- **65 current Active and Candidate projects**
- **Since 2010, 157 projects have been completed**
 - 71,349 jobs created
 - \$17.5 billion capital investment
 - \$301.2 million invested by the state
- Example project already completed:
 - Tufting Court in Davidson County
 - Completed 8/30/2019 for just over \$500,000



Safety Update

Traffic Incident Management Facility



Traffic Incident Management Facility



Traffic Incident Management Facility



TDOT HSIP Funding

- **Highway Safety Improvement Program (HSIP)** (~\$50 million/year)
- Road Safety Audit (RSA) (~\$25-30 million/year)
 - STID – Project Safety Office
 - Operations Division
 - Multi-modal Division
- Statewide resurfacing program (~\$10-15 million/year)
- Spot Safety (~\$4 million/year)
- Tennessee Highway Safety Office

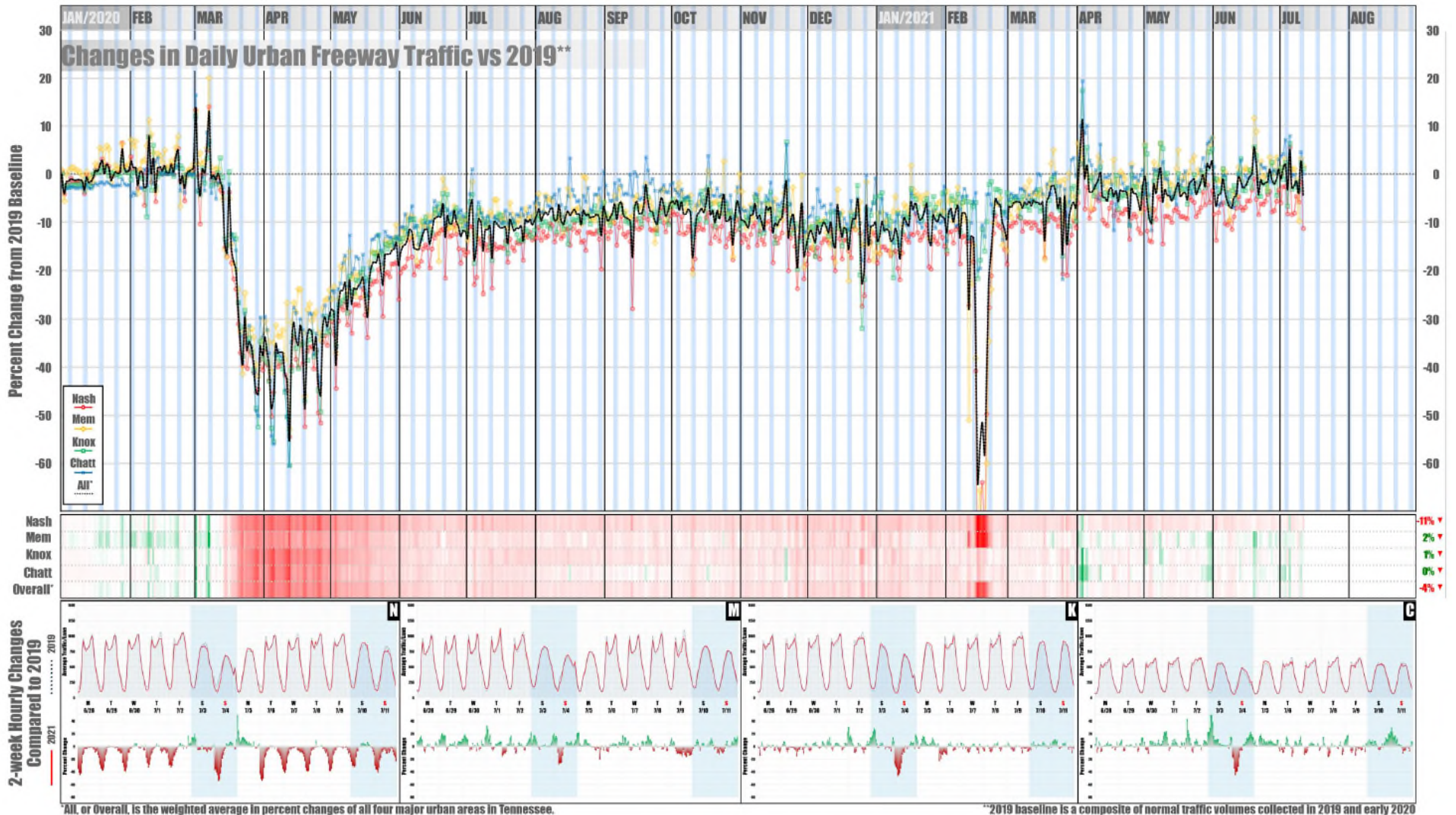
Road Safety Audit/Initiatives

Safety Projects: year/total -let/cost

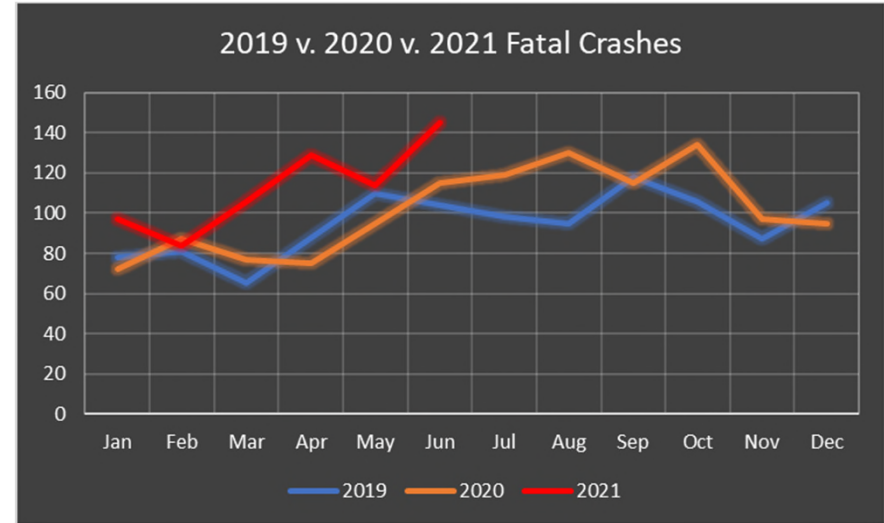
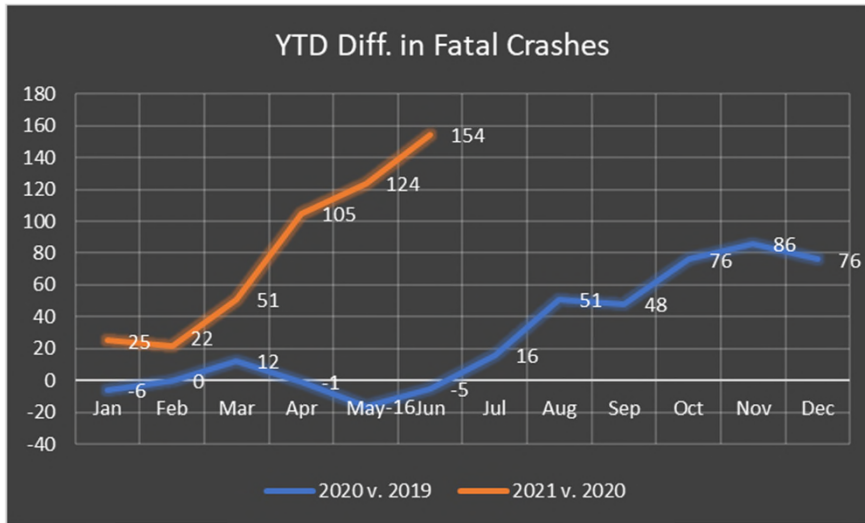
- 2016 92 - total Safety Projects let to contract Cost: \$23,242,490
- 2017 111 - total Safety Projects let to contract Cost: \$61,528,220
- 2018 86 - total Safety Projects let to contract Cost: \$38,636,530
- 2019 50 - total Safety Projects let to contract Cost: \$49,541,600
- 2020 85 - total Safety Projects let to contract Cost: \$38,575,100

Total: 424 let to contract Cost: \$211,523,940

Tracking Traffic During COVID-19



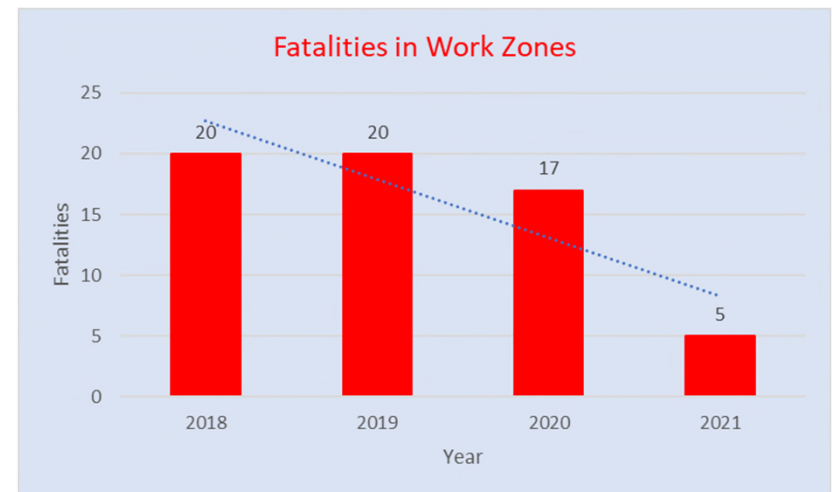
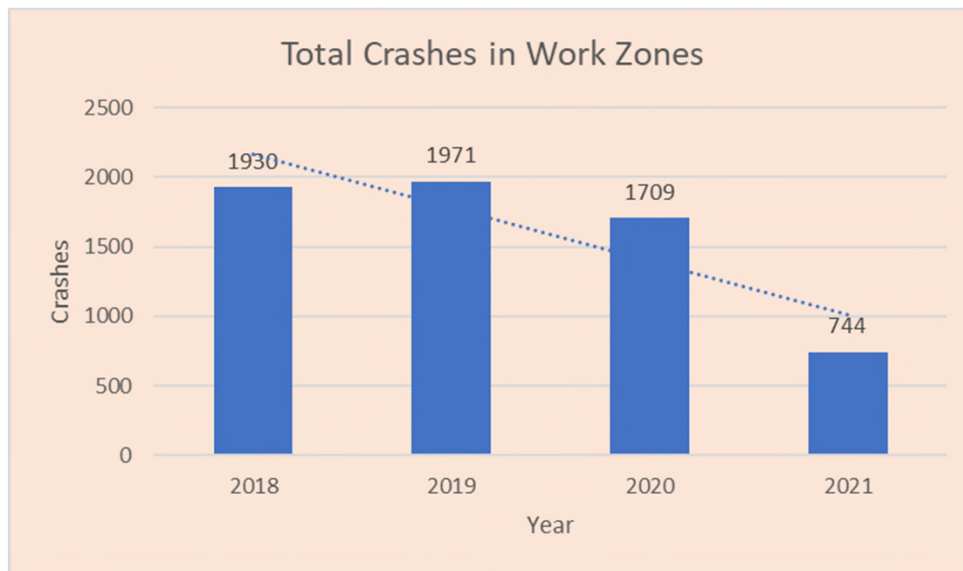
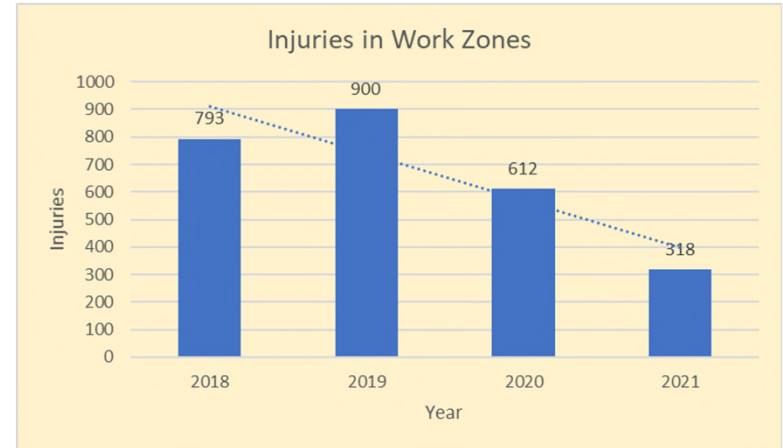
Fatal Trends 2019 v. 2020 (TN FARS 7/13/21)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Total
2019	78	81	65	88	110	104	98	95	118	106	87	105	1135
2020	72	87	77	75	95	115	119	130	115	134	97	95	1211
2021	97	84	106	129	114	145	-	-	-	-	-	-	675
YTD Difference	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Diff
2019-2020	-6	6	12	-13	-15	11	21	35	-3	28	10	-10	76
2020-2021	25	-3	29	54	19	30	-	-	-	-	-	-	154

Work Zone Crashes

Tennessee Work Zone Crashes				
	2018	2019	2020	2021 (as of 6/9/21 report)
Total WZ Crashes	1930	1971	1709	744
Injuries	793	900	612	318
Fatalities	20	20	17	5



National Trends

US National Library of Medicine National Institute of Health - Study

- **Coronavirus disease 2019: What could be the effects on road safety?**
- Usually, economic decline causes decreases in Travel and Exposure thus reducing the risk of collisions
- COVID-19 pandemic has impacted driver behavior with increased stress, more “free” (idle) time, increased consumption of alcohol and drugs, and greater opportunities for speeding and stunt driving, which have the opposite effect on road safety
- California Highway Patrol issued almost 2500 citations for driving over 100 mph from mid-March to mid-April 2020, an 87% increase over 2019
- In the United States, there was a 30% increase in drivers speeding in excess of 100 mph

Thank You!

Questions & Comments

Contact Information

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