

NORTH CAROLINA Department of Transportation



NCDOT Work Zone Towing Initiatives

Jennifer Portanova, PE, CPM

Incident Management Strategies



Contract Tow
Programs

Dynamic
Trailblazing Signs

Expanded IMAP
Routes

Static Trailblazing
Signs

Planned
Detours/Alt Rts

DMS/CMS

Traveler Info (DriveNC.gov, Waze, etc.)

Complex ICM Plan

Additional IMAP

Coordinated Signal
Timing Plans

New ITS Devices

HAWKS

Adjusted Signal
Timing

Simple
Response Plans

TRAFFIC IMPACTS

Tow Contract Evolution

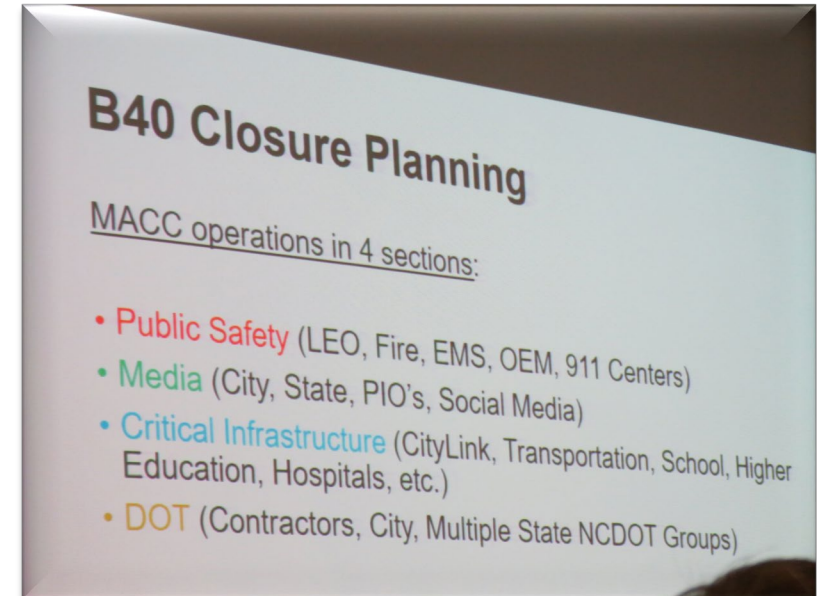
- Varying intent and emphasis
- Contractor managed
- Lacked performance measure enforcement
- Only project limits
- Not always supported with ordinance or statute
- Not always synchronized with partners

- Mobility and Safety focused
- NC DOT managed
- Incentives and Disincentives tied to performance measures
- Project limits and alternate routes
- Has MOUs w/ stakeholders; supported by statutes / ordinances
- STOC / TMC manages deployment
- Heavy emphasis on training and relationships with all parties



Decision to use Network Towing in Winston-Salem

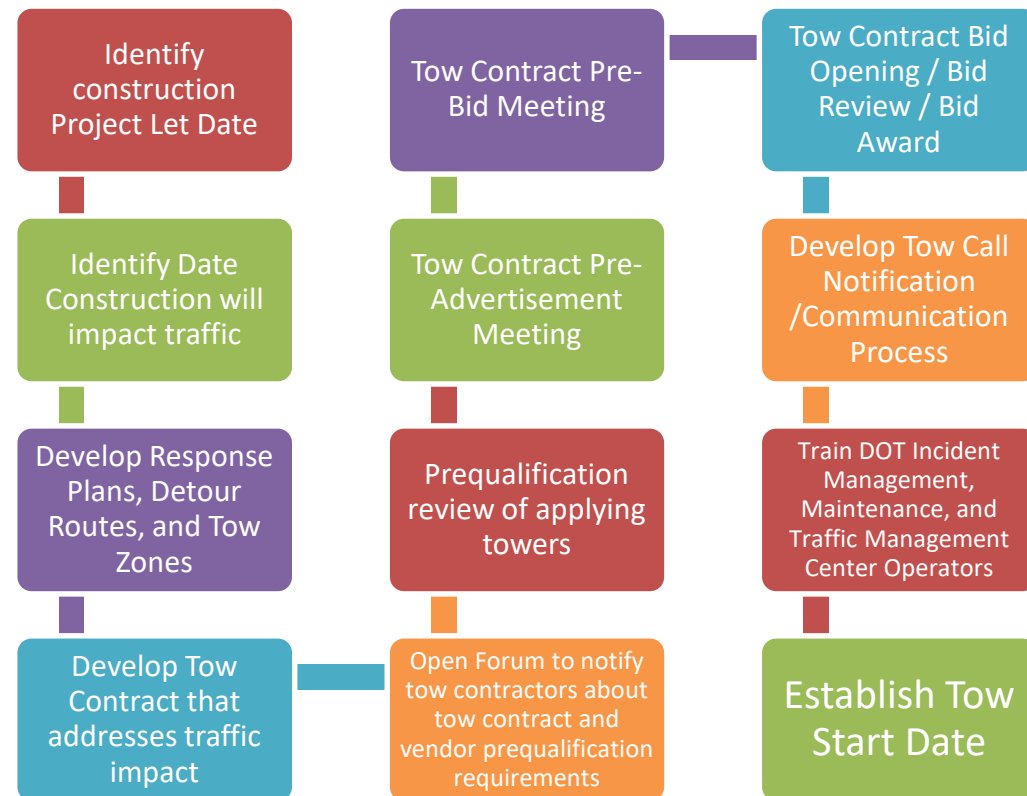
- 1.2-mile Interstate closure on Bus.40, downtown Winston-Salem
- 85,000 cars daily
- ~18 months closed
- Expected network strain
- Time available to plan
- Maintain mobility
- Opportunity for NCDOT driven tow program

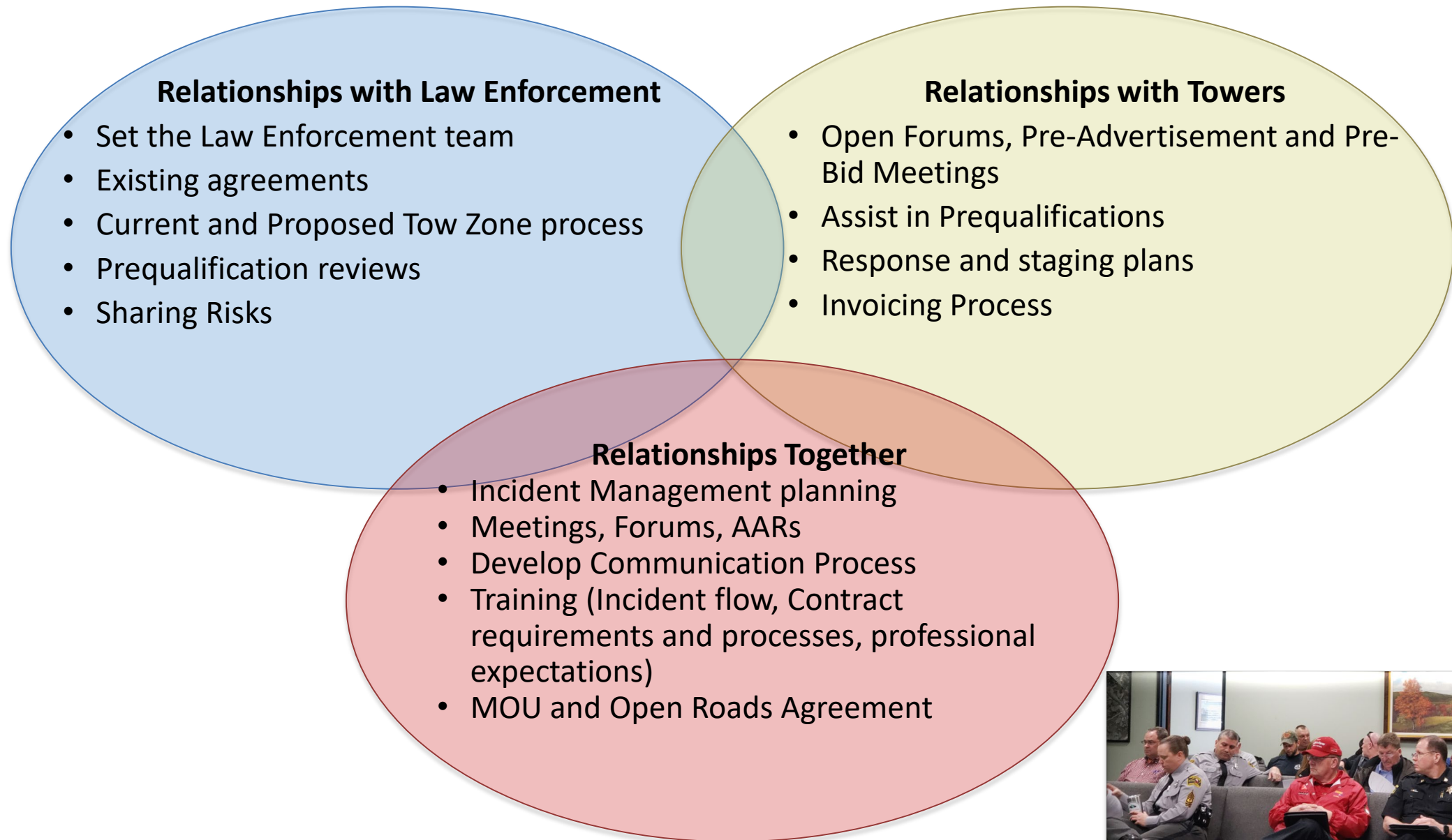


Legal Authorities

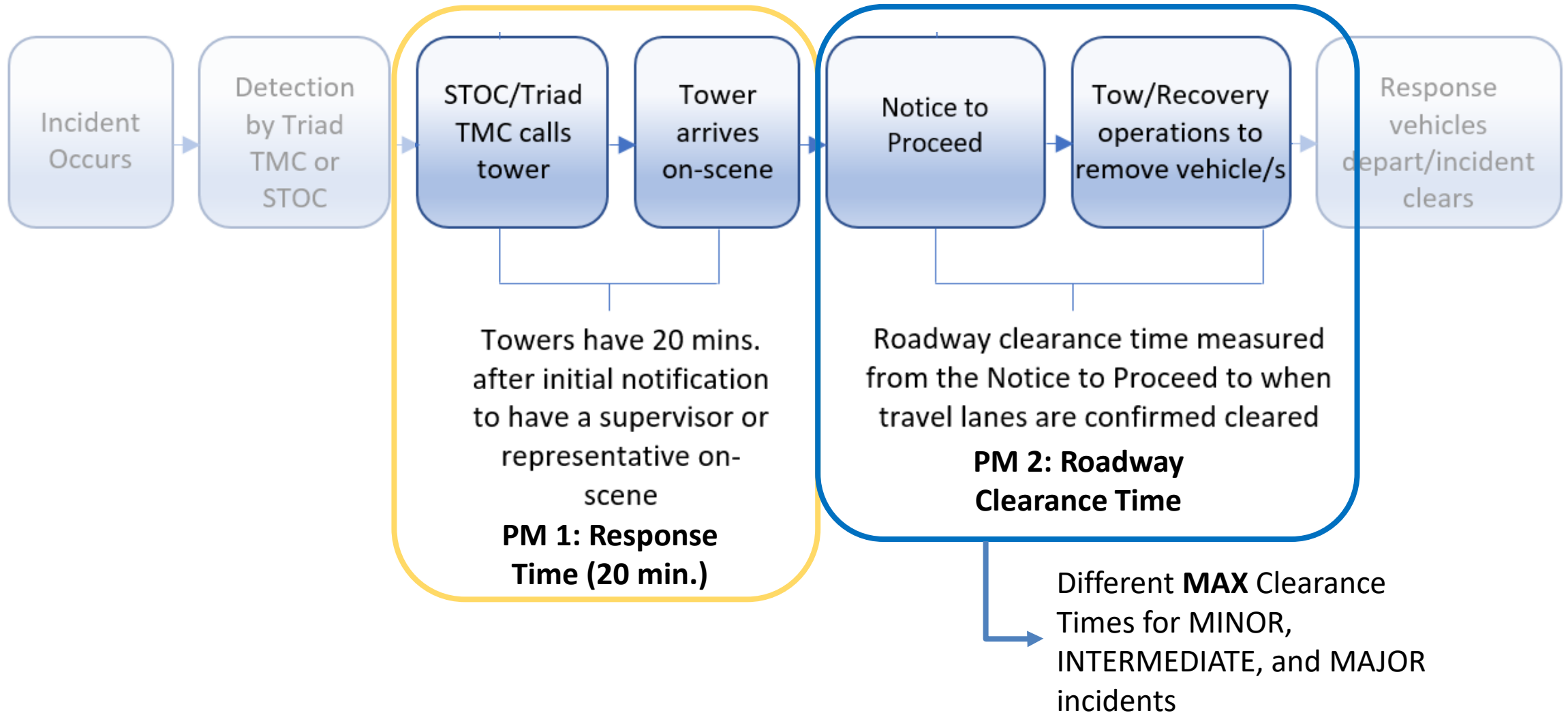
- § 136-28.1: Letting of contracts
- § 143-135.8: Prequalification
- § 20-161 (f): Authority to immediately removed vehicles
 - Law changed for NCDOT to initiate
 - NCDOT, Contractor for NCDOT, Law Enforcement
 - Hold Harmless
 - MOU with State Highway Patrol

Tow Contract Process:





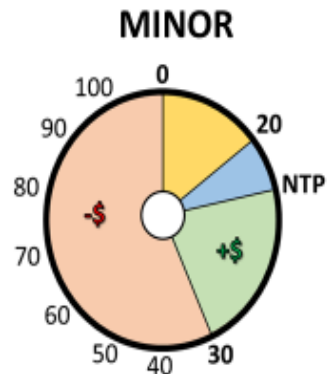
Performance Measures



Tower Timeliness for Incentives & Disincentives

Incentives & Disincentives: Light Duty

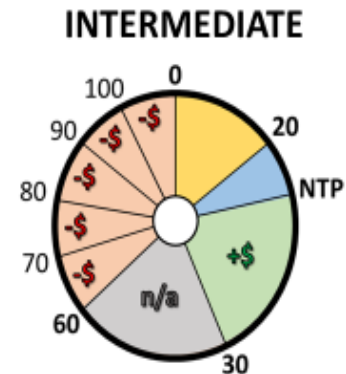
■ Response Time
 ■ Scene Assessment
 ■ Clearance w/in Threshold (+\$)
 ■ Clearance w/in MAX Time (n/a)
 ■ Clearance beyond MAX Time (-\$)



Incentive: Monthly Service Fee (MSF)

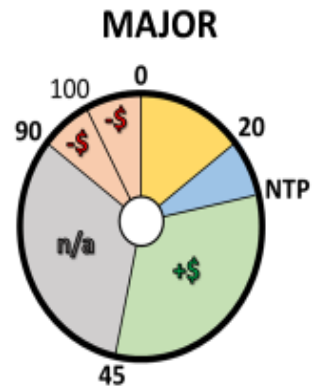
Disincentive:

- 1st Offense: -10% of MSF
- 2nd Offense: -20% of MSF
- 3rd Offense: Off Contract



Incentive: +\$500 / incident

Disincentive: -\$10 for every minute after 60 minutes (i.e. -\$600/hr)

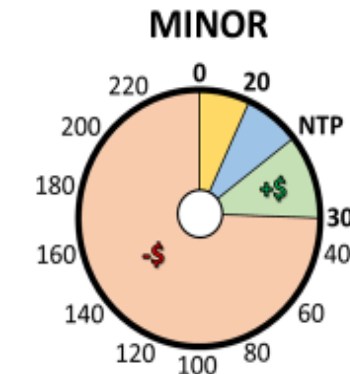


Incentive: +\$1,000 / incident

Disincentive: -\$10 for every minute after 90 minutes

Incentives & Disincentives: Heavy Duty

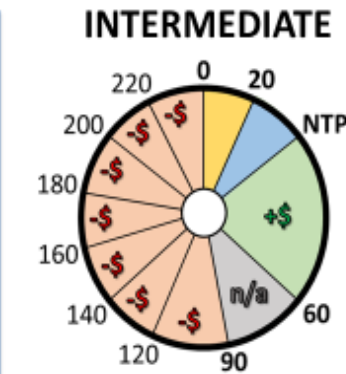
■ Response Time
 ■ Scene Assessment
 ■ Clearance w/in Threshold (+\$)
 ■ Clearance w/in MAX Time (n/a)
 ■ Clearance beyond MAX Time (-\$)



Incentive: Monthly Service Fee (MSF)

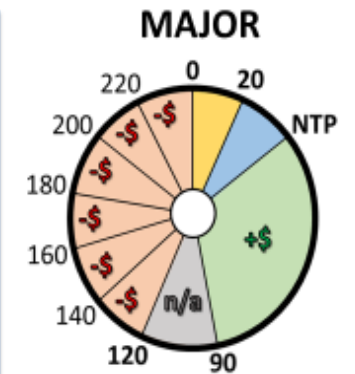
Disincentive:

- 1st Offense: -10% of MSF
- 2nd Offense: -20% of MSF
- 3rd Offense: Off Contract



Incentive: +\$2,500 / incident

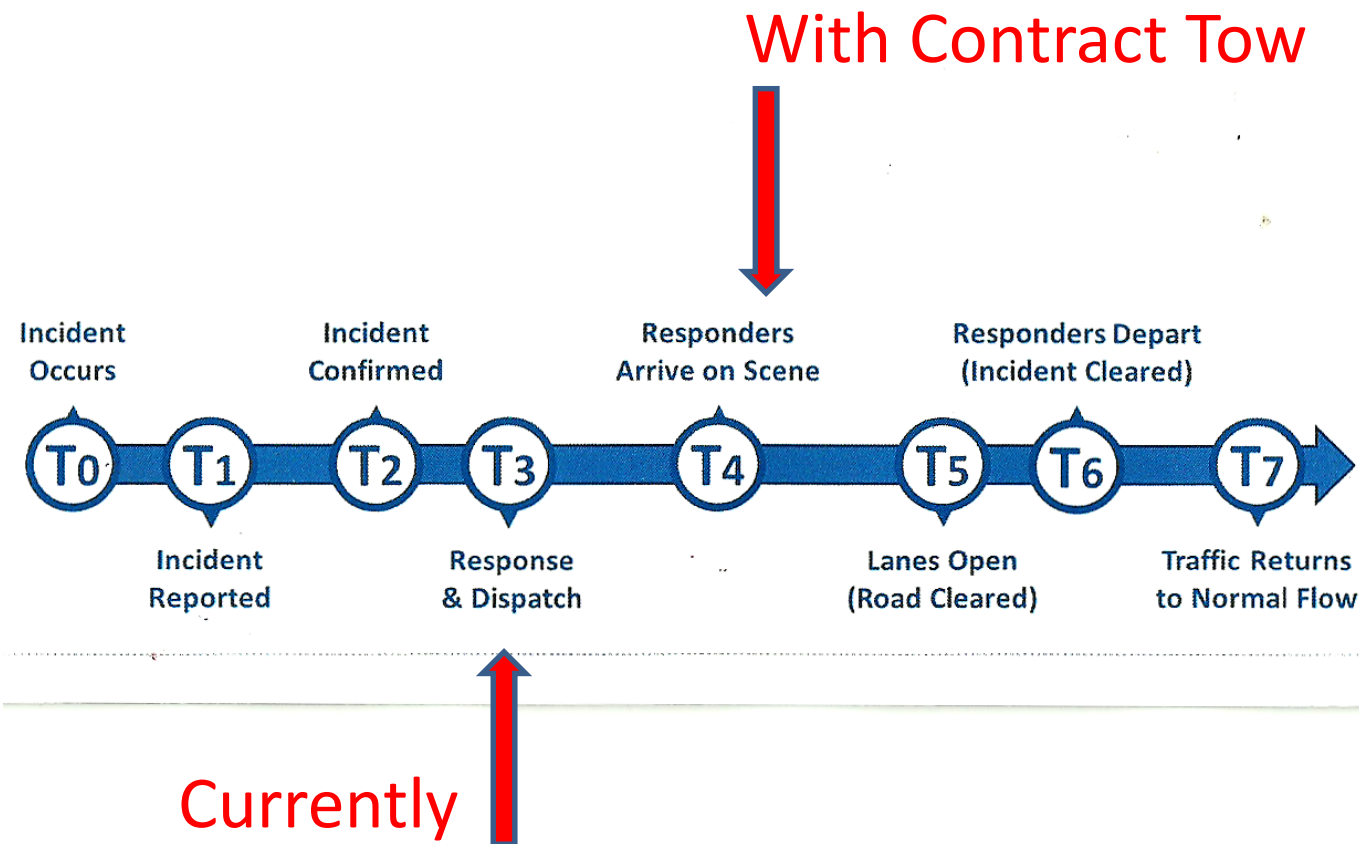
Disincentive: -\$10 for every minute after 90 minutes (i.e. -\$600/hr)

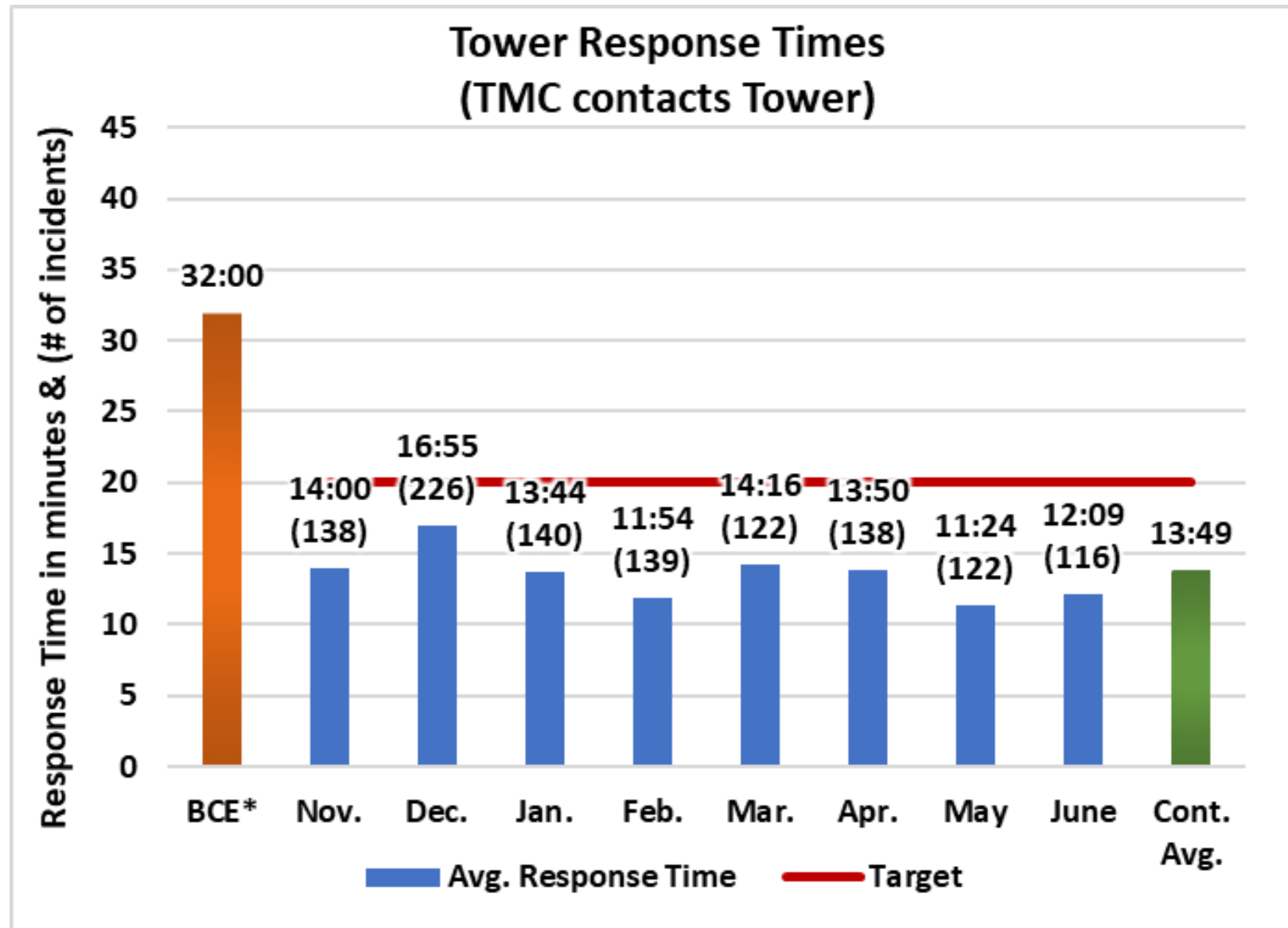


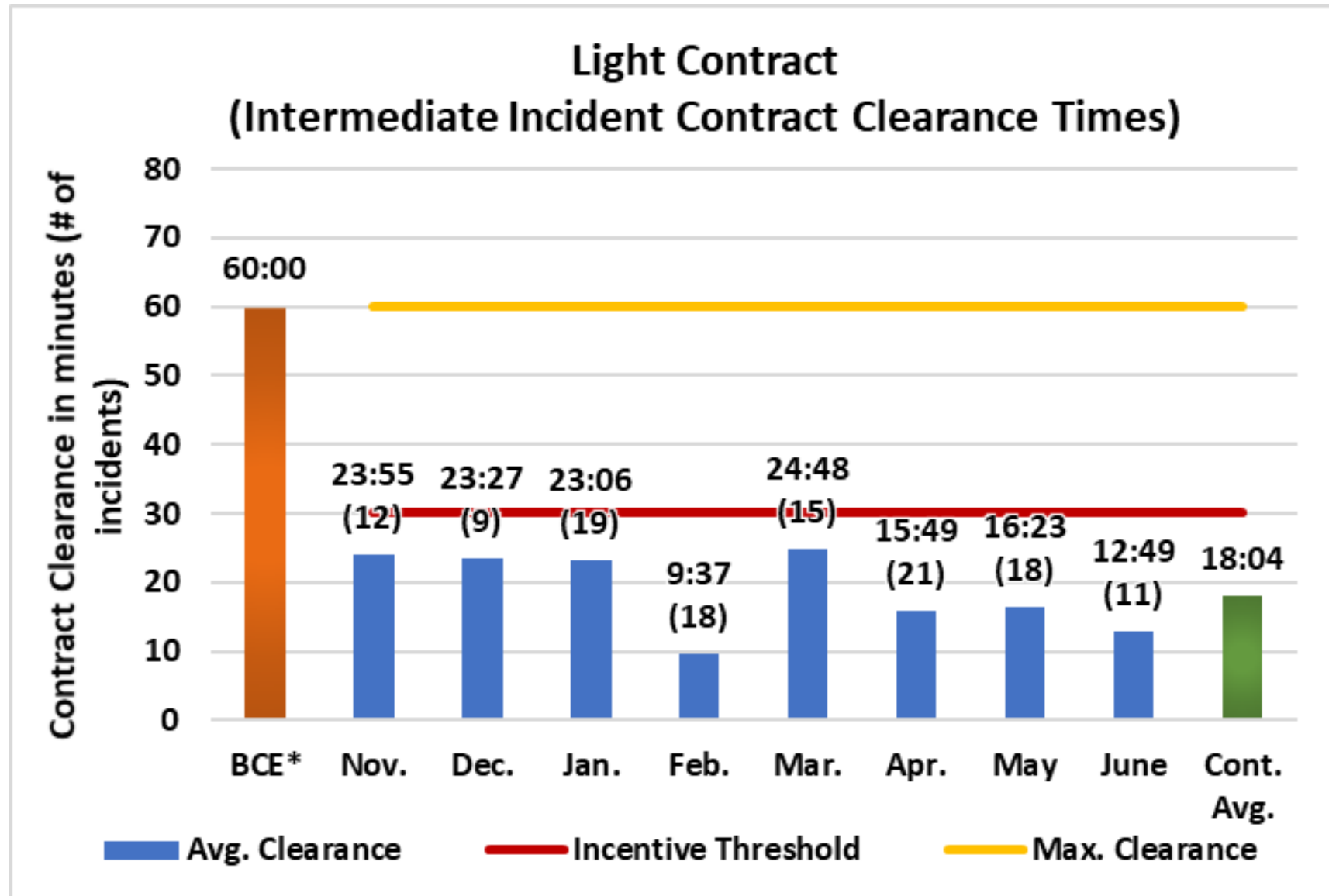
Incentive: +\$5,000 / incident

Disincentive: -\$10 for every minute after 120 minutes

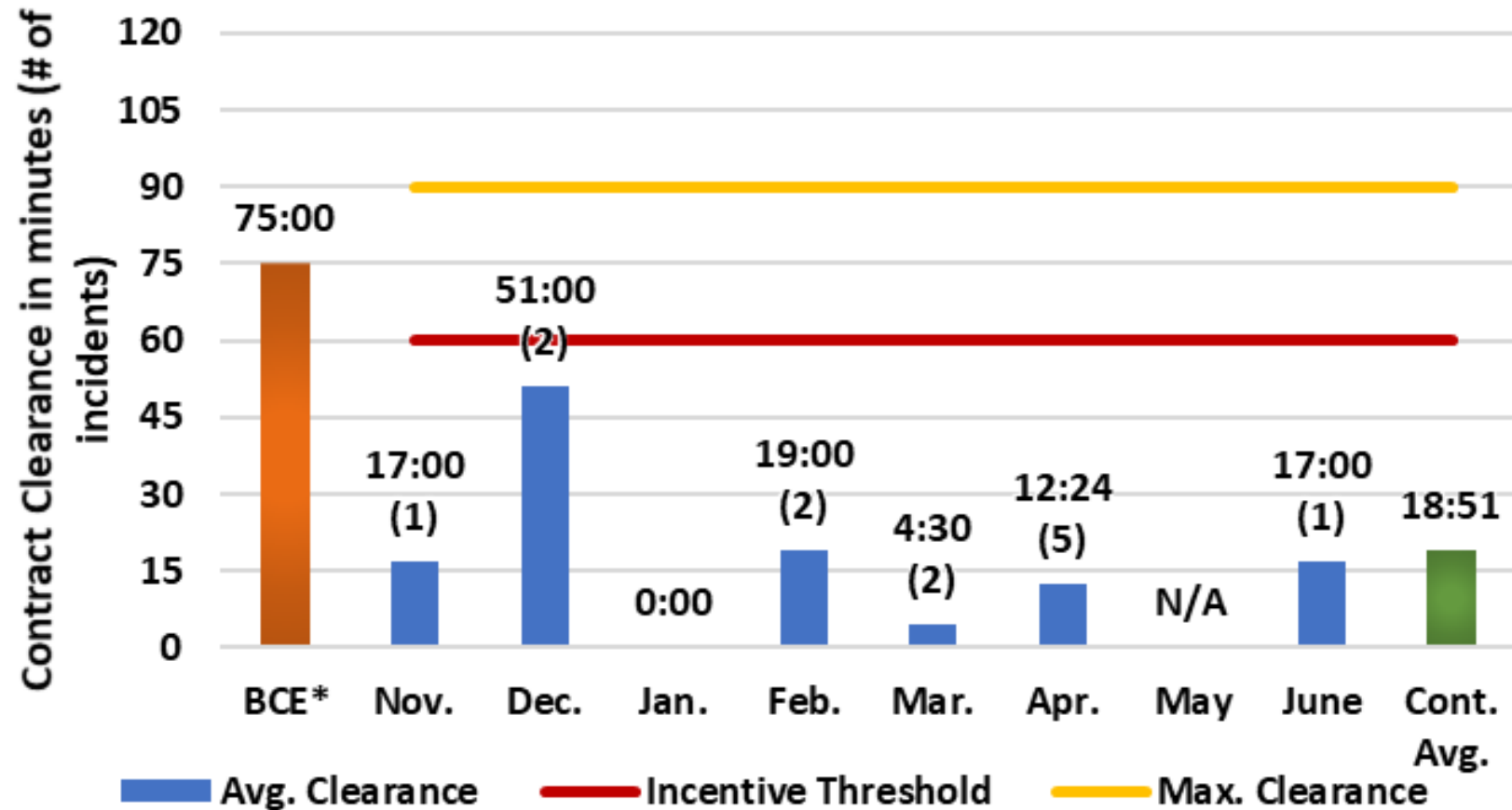
TIMELINE ACCELERATION FOR TOWER DISPATCH

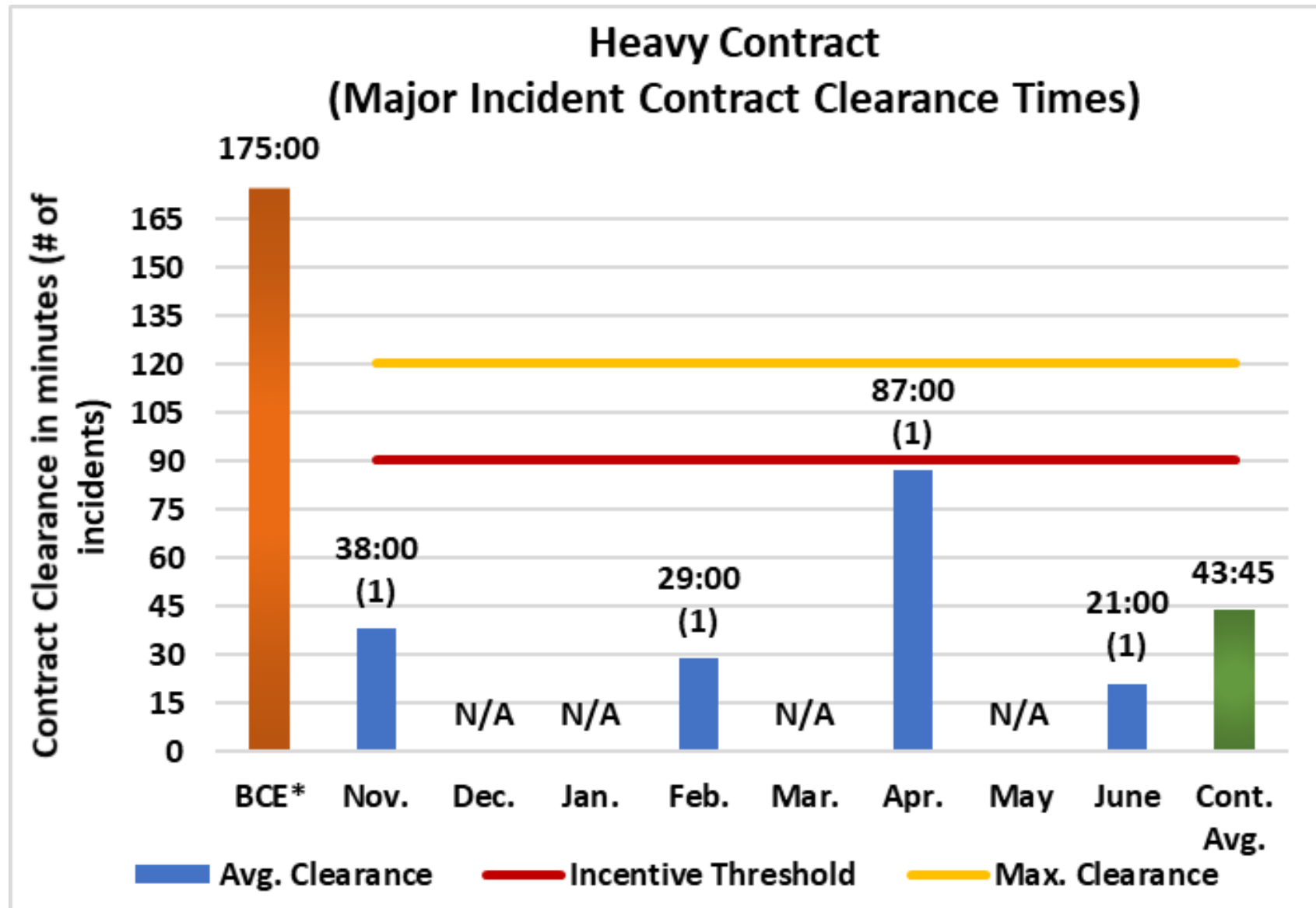






Heavy Contract (Intermediate Incident Contract Clearance Times)





Key Takeaways

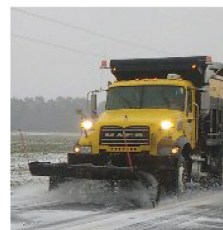
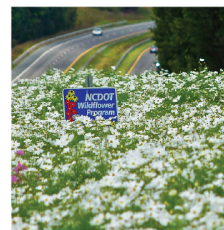
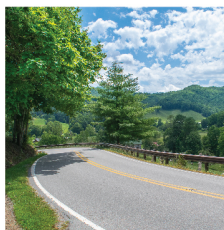
- Network Towing works
 - Clearance Times
 - Tower Response Times
 - Incentives / Disincentives
 - Before/After Study
- Relationships are key
 - Buy-in at all DOT levels and w/ stakeholders
 - Takes time
- Check your state laws
 - Existing statutes may work
- Next Steps





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