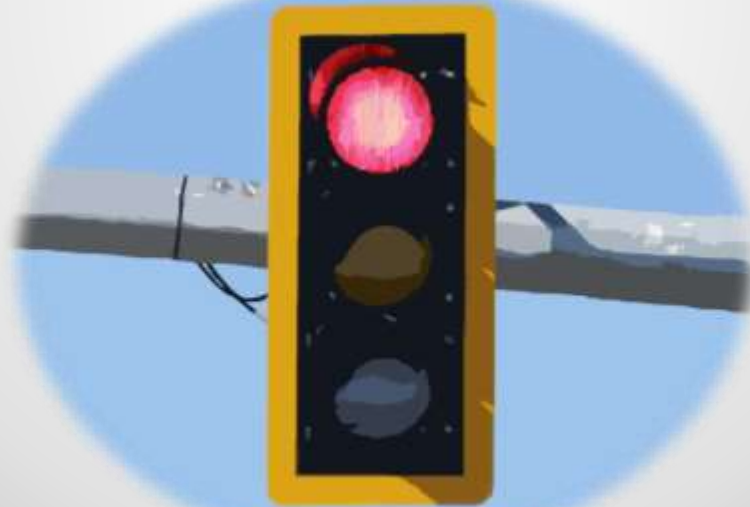


Traffic Signal Inventory And Signal Upgrades



TRAFFIC SIGNAL INVENTORY UPDATE

- Original TSI was created for Electromechanical Controllers
- November 2012 - the New TSI Format was released
 - Format included Modification to allow for better use with the current LADOTD controller, Naztec TS2
 - The TSI Construction Format was also introduced
- June 2014 - the New TSI Format 2.0
 - Major additions
 - Thru/OLP and Turns line added to rings
 - IP Addresses
 - Pattern, Split and Action numbers added
 - Phase Mode
 - New Symbols on Diagram page

TRAFFIC SIGNAL INVENTORY (v2.0)

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TSI NO. 12-345

PAGE: 1 OF 8

INTERSECTION:		CTRL SEC:	LOGMILE:
CITY:	PARISH:	LAT:	LONG:
SIGNAL TYPE:		INTERCONNECT TYPE:	REV. DATE: INSTALL DATE:
SIGNAL WARRANTS:	MAINTAINED BY:	CONT. MANUF: Naztec	SYS#: Controller IP:

TRAFFIC SIGNAL COORDINATION PLANS (PHASING MAY VARY FROM FREE OPERATION)

Phasing											Pattern:

Int. Times												Ring Phases
FREE OPERATION - SEE PAGE 4 FOR TIMING PARAMETERS												
Ring 1	Thru/OLP											
	Turns											
Ring 2	Thru/OLP											
	Turns											

Action = CYCLE LENGTH = FREE Sequence #: Reference Φ : Max:

Phasing											Pattern/Split:
Split	sec										
Force Offs	sec										Offset =
Yield Points	sec										sec

Int. Times												Ring Phases
Ring 1	Thru/OLP											
	Turns											
Ring 2	Thru/OLP											
	Turns											

Action = 1 CYCLE LENGTH = 0 Sequence #: Coord Φ : Max:

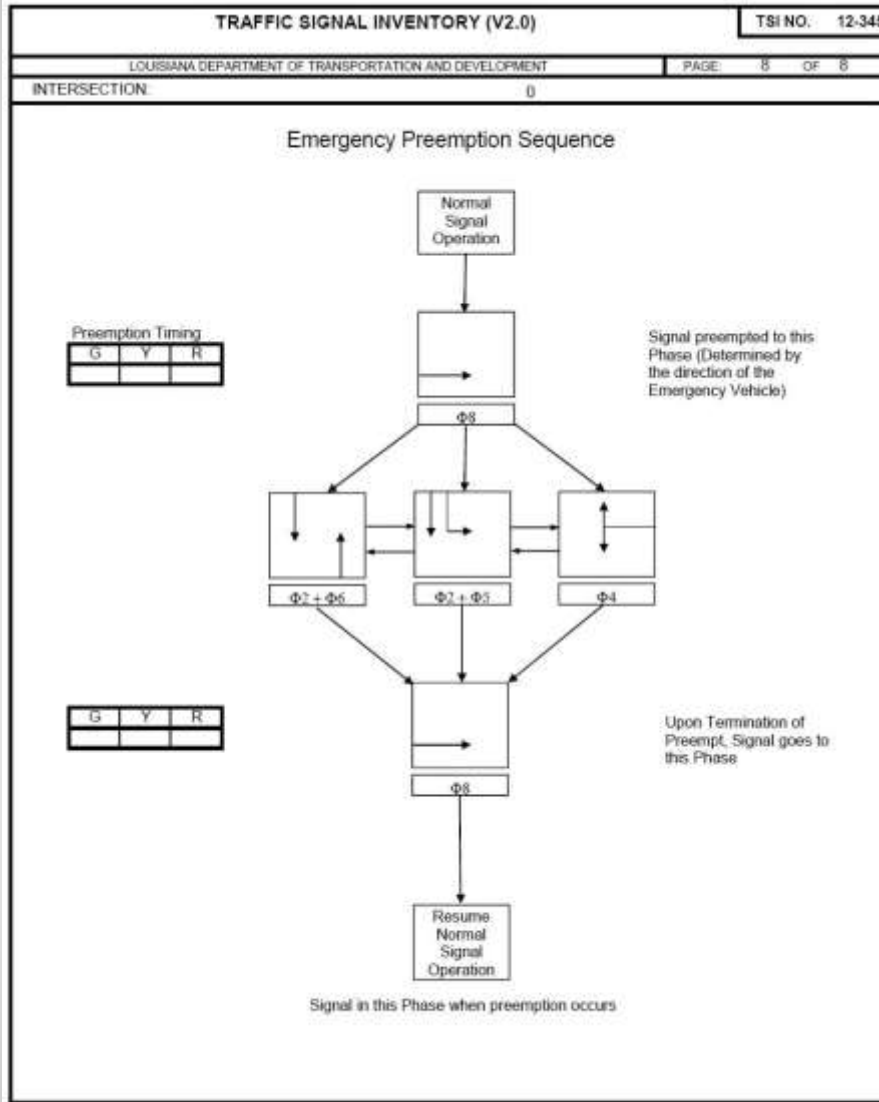
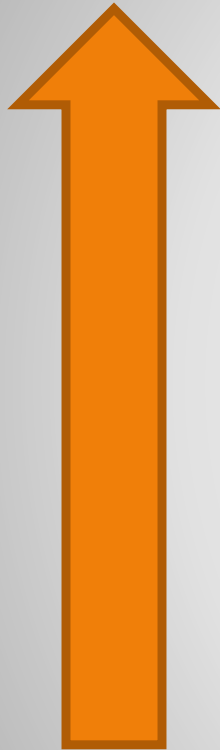
TSI Coordination Page

TRAFFIC SIGNAL INVENTORY (v2.0)				TSI NO. 12-345						
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT				PAGE: 4 OF 8						
Intersection: 0				Phase Timing Parameters						
Phase Mode	Force Off:	Phase #	1	2	3	4	5	6	7	8
		Movement:	↶	↓	↷	←	↘	↑	↙	→
PARAMETER	RANGE (sec)									
MIN GREEN (MIN I)	0 - 99									
GAP EXTENSION	0 - 10									
MAX GREEN I (MAX I)	0 - 255									
MAX GREEN II (MAX II)	0 - 255									
YELLOW CLEARANCE (YEL)	3 - 7									
RED CLEARANCE (RED)	0 - 4									
WALK (WALK)	0 - 100									
PED CLEARANCE (P CLR)	0 - 100									
ADDED INITIAL GREEN	0 - 10									
MAXIMUM INITIAL	0 - 255									
TIME BEFORE REDUCTION	0 - 255									
TIME TO REDUCE	0 - 255									
REDUCE BY	0 - 99									
MINIMUM GAP	0 - 10									
DYNAMIC MAX LIMIT	0 - 255									
DYNAMIC MAX STEP	0 - 25									
RECALL	MIN/MAX									
PEDESTRIAN CALL	ON/OFF									
LOCK CALLS	ON/OFF									

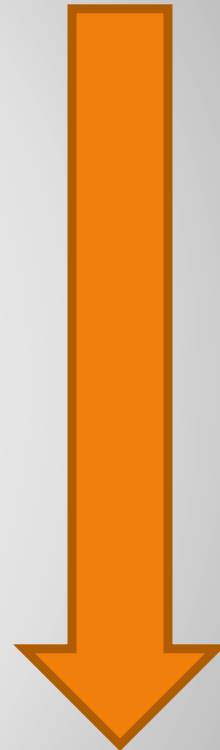
TRAFFIC SIGNAL INVENTORY (v2.0)				TSI NO. 12-345						
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT				PAGE: 4 OF 8						
Intersection: 0				Phase Timing Parameters						
Phase Mode	Force Off:	Phase #	1	2	3	4	5	6	7	8
		Movement:	↶	↓	↷	←	↘	↑	↙	→
PARAMETER	RANGE (sec)									
MIN GREEN (MIN I)	0 - 99									

TSI Phase Timing Page

OLD TSI



NEW TSI
2.0



TSI Preemption Page

TRAFFIC SIGNAL INVENTORY (v2.0)				TSI NO. 12-048	
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT				PAGE: 9 OF 9	
INTERSECTION: 0		CTRL SEC: 0		LOGMILE: 0	
CITY: 0		PARISH:		LAT: 0	
SIGNAL TYPE:		INTERCONNECT TYPE:		REV. DATE: 01/00/00	
SIGNAL WARRANTS		MAINTAINED BY:		CONTROLLER MANUF: Traffic	
				SYSTEM #	
Traffic Signal Notes Page					
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TSI Notes Page

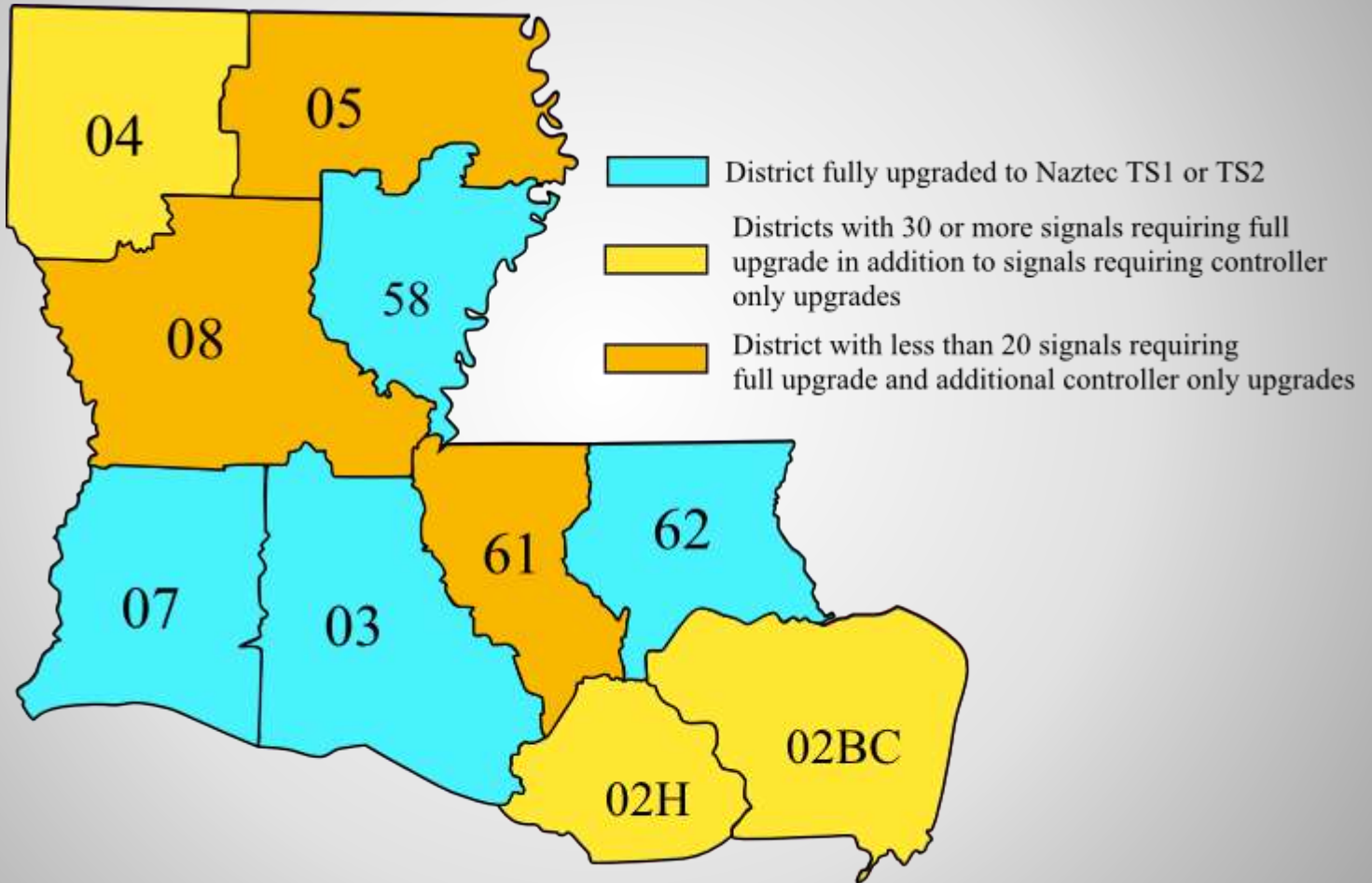
TRAFFIC SIGNAL UPGRADES

- GETTING STARTED
- WHERE WE'RE AT NOW
 - THE SIGNAL
 - OUR GOALS

GETTING STARTED

- Agile Assets Reports
- Around 2600 Traffic Signals in Louisiana, of which 2128 are currently Naztec TS1 or TS2 controllers (83% of signals based on Agile Assets Report)
- Around 450 Traffic Signals need to be brought to current LADOTD Standards (Based on Agile Assets Report)
- Each District was sent a list of signals in need of possible upgrade.

WHERE WE'RE AT NOW



District Upgrades Based on Controller

WHERE WE'RE AT NOW

CURRENT UPGRADE PROJECTS

- District 04 Controller Upgrade (Letting: 14/15)
- District 02BC Controller Upgrade (Letting: 14/15)
- District 02H Controller Upgrade(Letting: 14/15)
- District 03 Flashing Yellow Arrow Upgrade (Letting: 15/16)
- District 08 Controller Upgrade(Letting: 15/16)
- District 58 Controller Upgrade(Letting: 15/16)
- District 61 Signal Upgrade III (Letting: 15/16)
- District 04 Signal Upgrade I (Letting: 16/17)
- District 05 Controller Upgrade(Letting: 16/17)
- District 07 Controller Upgrade(Letting: 16/17)

THE SIGNAL

Current Upgrades

- Mast arms
- TS2 Controller
- Ground mounted cabinets
- GPS
- Detection

What's In the Pipeline

- Longer mast arms (up to 70ft length single and 55ft with 45ft dual arm)
- Upgrading Signal Software (Currently Streetwise)
- Communications
- Possible new forms of detection
- Back up power

THE SIGNAL

What We'll Be Looking At

- Agile Assets Maintenance Report
- Polling the DTOE's
- Designated Critical Corridors
- Possible Communication Improvements

OUR GOALS

- A list of signals to be upgraded with an estimated upgrade date
- 20 year upgrade cycle (About 130 signal upgrades a year)
- Communication with all signals
- Keeping relevant technology in the cabinet

Questions?

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