Pedestrian Advisory Council

City of Austin
Late Night Flash Operation
Overview

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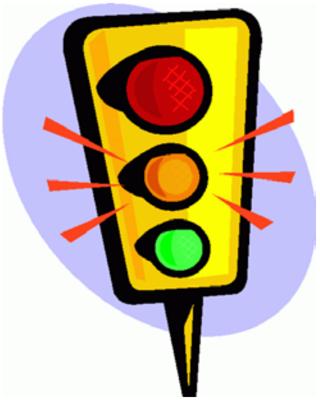
Key Takeaways

1. Overview – What is late night flash and reasons for it
2. Austin – Current Program
3. Other Cities – Trends
4. Safety Research
5. Next Steps

Overview



Late Night Flash (LNF) Definition

- Operation of traffic signals such that the minor street flashes red and the major street flashes either (1) yellow or (2) red

Late Night Flash Background

- TXMUTCD and MUTCD permits flashing operation
- Late night flash used throughout the country for decades
- Late night flash used in Austin for decades by TxDOT, Travis County, and City of Austin

Austin – Current Program

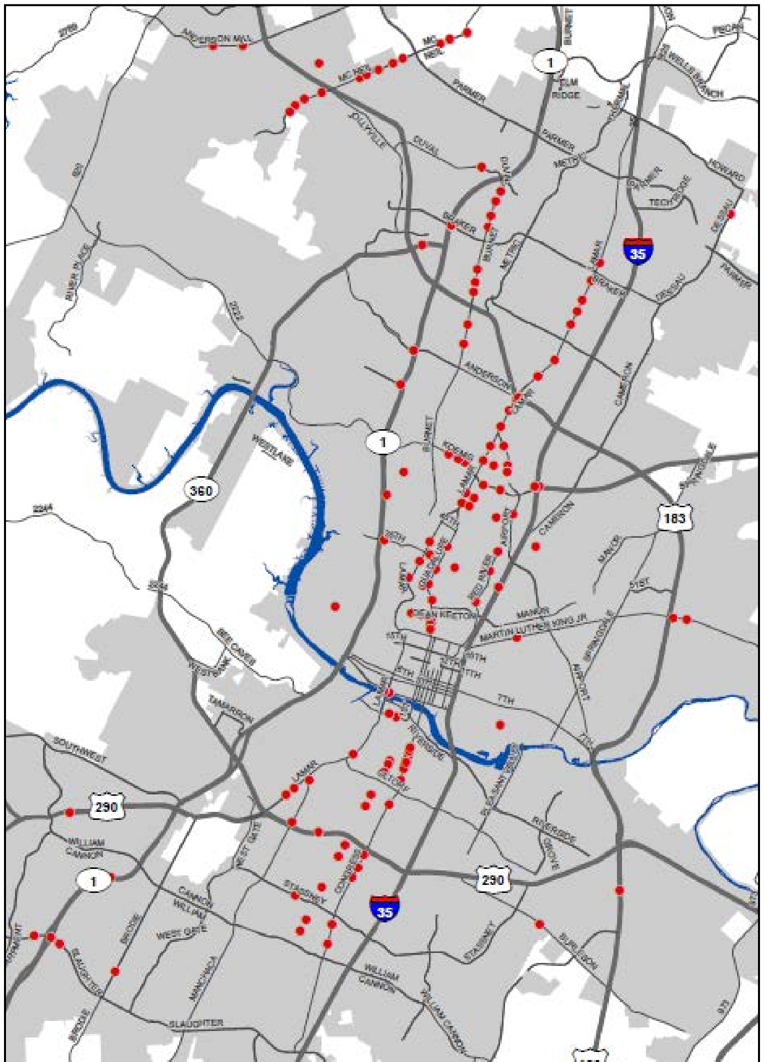
Reasons for Late Night Flash

- Detection technology at signals not working
- Drivers report inconvenience of unnecessary stopping and delay
- Low volumes for all modes

Austin – Current Program

- 973 traffic signals in Austin
- 144 signals operate with late night flash
  - 112 Yellow/Red flash
  - 32 Red/Red flash
- Typical start times: 11PM, 1AM; typical end time: 6AM
- Phasing out yellow/red late night flash
  (estimated completion Sep. 30, 2016)

Austin – Current Program



Primarily along 5 corridors:

- Lamar Blvd.
- Burnet Rd.
- South First St.
- Congress Ave.
- McNeil Dr.

Other Cities – Trends

- Many large cities have either discontinued or are in the process of discontinuing late night flash operation.
  - Dallas
  - Houston
  - San Antonio
  - Baton Rouge
  - Little Rock
- Cities are relying on detection in lieu of late night flash.
- Land use changes can result in traffic pattern changes.
- Complete Streets alignment.

Safety

2012 Federal Highway Administration Report

- 8 intersections in Winston-Salem, North Carolina had an 89% percent reduction in late night right angle collisions after LNF was removed.

ATD High Level Crash Analysis

- Purpose:

  Compare crash frequency between signals with
  (1) late night flash (LNF) operation and (2) normal operation

- LNF = yellow on main street and red on cross street
- 6 years of crash data (2010 – 2015)
- Crashes during flash hours (1am – 6am)

Safety

Results

Time of Day	All Crashes		Ped + Bike Crashes	
	LNF	Normal Op	LNF	Normal Op
1am - 6am	220	2,722	21	171
# of Signals	112	829	112	829
Crashes/ Year/Signal	0.33	0.55	0.03	0.04

- All Crashes (vehicles, bikes, peds):
  - LNF signals experienced fewer crashes per signal than Normal Op signals.
- Ped + Bike Crashes:
  - LNF and Normal Op signals experienced similar crash frequencies per signal.
  - Although small crash frequencies, Ped+Bike crashes represent a greater % of total crashes at LNF signals (10%) than at Normal Op signals (6%).

Next Steps

Continue Removing LNF (yellow/red) Operations

- Removed LNF at 60+ of 112 signals, continue w/remaining
- Add pedestrian detection (4 signals, may increase)
- Repair detection (12 signals, may increase)
- Estimate completing LNF removal by Sep. 30, 2016

Continue LNF (red/red) Operations

Conduct Before/After Study in 2017

- Determine safety impacts of late night flash removal
- Change signal operations as necessary
- Report back to PAC with results

Thank You

Austin Transportation Department