

# Pedestrian Advisory Council

## City of Austin Late Night Flash Operation Overview



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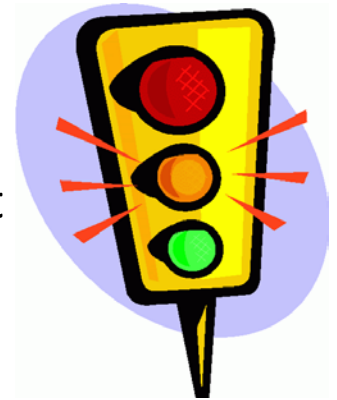
# Key Takeaways

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

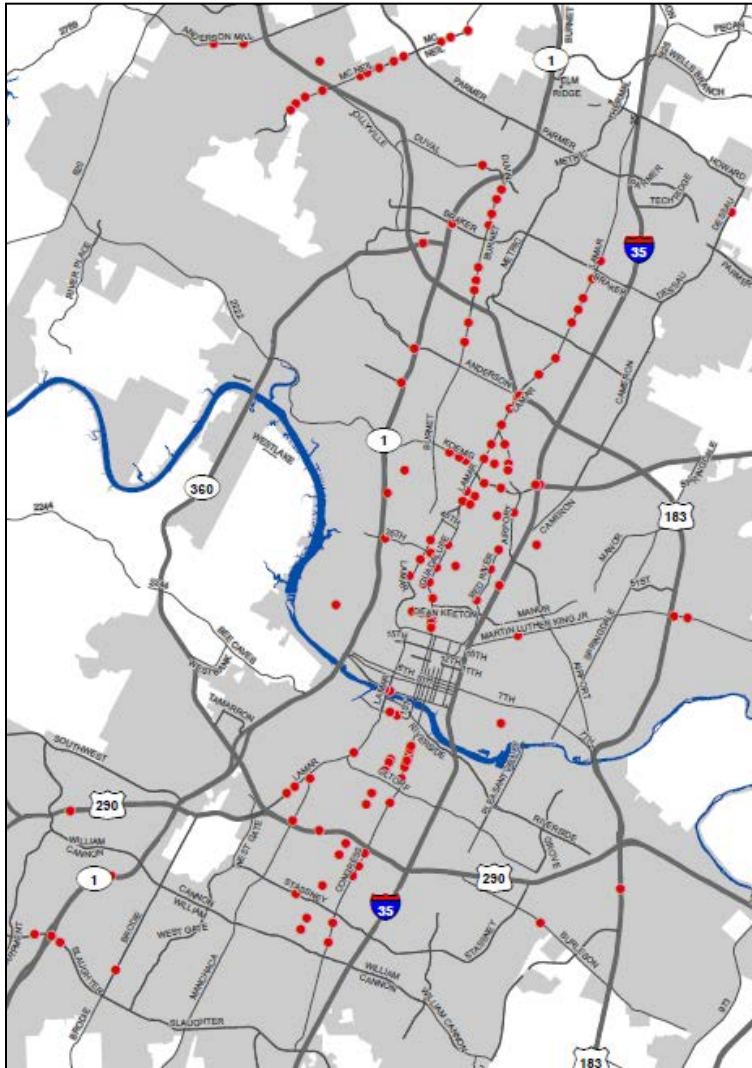
## Reasons for Late Night Flash

- 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
  - ➔ – 111 Yellow/Red flash
  - 33 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.

# 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	111	829	111	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.



# Next Steps

## Continue Removing LNF (yellow/red) Operations

- Removed LNF at 60 of 111 signals, continue w/remaining 51
- Add pedestrian detection (4 signals)
- Repair detection (12 signals to date, 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