MAYOR'S NEIGHBORHOOD ROUNDTABLE

COUNTY/CITY BUILDING

555 SOUTH 10TH STREET

Room 303

Monday, January 12, 2025, 5:30 p.m.

Meeting Notes

- **Welcome and Introductions**

College View	**Country Club**	**Clinton**	**East Campus**	**Everett**	**Havelock**
Tracy Corr	Dick Piersol	Kelly Hazard	Paul Johnson; Tut Kailech	Midge Pace	Nick Hernandez
Hawley	**Indian Village**	**Irvingdale**	**Meadowlane**	**Witherbee**	**Woods Park**
Carol Mathias	Rosina Paolini	Roy Helm	Kay Wenzel	Julie Floodman	Randy Smith

- Other Attendees: Matt Hopper & Thomas Shafer (LTU), Jon Carlson (Mayors Office), Mary Carol Bond (LLCHD), Councilmember Bennie Shobe

- **Mayor Gaylor Baird Comments**
  - Mayor Collen Sang's passing last month was a good opportunity to reflect on the difference someone can make when someone starts on the ground in a neighborhood association, local organization; she never stopped serving even after her time serving as an elected official
  - Still recycling holiday lights, more details at https://www.lincoln.ne.gov/News/2025/12/19a
  - LTU has created through StarTran new opportunities to schedule paratransit services to make it easier to access and more efficient and effective; more details can be found at https://www.lincoln.ne.gov/City/Departments/LTU/StarTran/Paratransit

- **Green Light Lincoln (Matt Hopper & Thomas Shafer, LTU)** –
  - See the attached slides for more details or on the Green Light Lincoln website at https://www.lincoln.ne.gov/City/Departments/LTU/Transportation/Traffic-Engineering/Green-Light-Lincoln
  - 432 signalized intersections which have 1400 individual traffic signals
  - Purpose is safety first, so delay is intentional at times (ex: red at all four legs

of an intersection to ensure all traffic is cleared)
- Pavement sensors are going away in lieu of cameras; can do more maintenance from the office versus at cabinets as well
- Shortest cycle might be 10-15 seconds on a very low demand street
- Flashing reds/yellows for overnight traffic where volumes are low are going away in communities that use it because they see higher crash rates so Lincoln not using this method
- System can be changed by time of day, demand, pedestrian needs, safety needs (ex: the signals during Husker game days are programmed different than a normal day)
- Emergency vehicles still have the ability to change the signals to get through, but they have found that it works better not to change the signals and instead just move through as vehicles get out of the way
- Now using Centracs System to manage all signals which are hooked up into WIFI to manage from a central management software system
- N Street cycle track bike signal goes before the vehicle signal to get them moving before vehicles that may be turning, then goes red to allow vehicles to turn without conflict
- If a pedestrian hits the button, it ends up in the cue for turning on, but has to fit into the cycle in a way that doesn't put a pedestrian into the intersection with a vehicle movement that would cause danger to them
- Pushing the pedestrian button more than once doesn't speed up the signal change
- Use a Avigilon System for traffic monitoring cameras which is only for the flow of traffic as the camera's don't get close enough to see into vehicles or see plates
- Green Light Lincoln was started in 2016 with the major corridors in Lincoln; plan to go through each corridor every 3-5 years to keep up to date and reduce the updates needed
- Did testing after the project was completed and found time savings on updated corridors (ex: O Street saw 2 minutes savings to drive the corridor from Skyway to Antelope Parkway)
- Adaptive Signal Technology (gets into AI) tested on 27th street, but finding it's not working well because it's only updating this intersection and doesn't account for the rest of the system and causes delays at other intersections.
- No ordinance for putting in roundabouts but LTU has a policy to start with roundabouts where they make sense because they are lower cost, speed up movement through the intersection, and are safer traffic control methods
- Traffic can sometimes outgrow a roundabout or may not be a good fit if there is too much through traffic and not enough traffic turning out of it to allow breaks for side traffics to move through
- Keeping an eye on the trend towards autonomous vehicles and how they interact with the lights. Current system can do some connections with self driving vehicles, but a future system upgrade will likely accommodate them.

- Improvements to the main thoroughfares did balance side street traffic movements, but depending on the intersection some side streets may not have improved for traffic flows; priorities based largely on traffic volumes and to an extend location in the corridor
- Whether protected left turn is at the beginning of the cycle (leading) or at the end (lagging) is determined based on traffic flow, time of day (when there are heavier turning movements), traffic flow and can change during the day
- Traffic congestion at 27th and Nebraska Parkway post South Beltway stayed relatively the same because it reduced from fewer trucks, but vehicles that had avoided this area are now using it and filling the reduction in truck traffic
- Safe Streets Lincoln (Vision Zero) will have some sort of impact to improve safety in the system
- School zones are integrated into the system as well

- **Announcements**
  -

- **Future Agenda Ideas**
  - Study on neighborhood parking restriction signs

- **Adjourned at 6:37 pm**

Next Mayor's Neighborhood Roundtable Meeting
February 9, 2025, 5:30 p.m.
City County Building Room 303

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How Traffic Signals Work & Green Light Lincoln (GL^2) Program Overview

Can you guess….

Does LTU manage more or less than 500 traffic signals?

- LTU manages over 1400 Traffic Signals

Does LTU have more or less than 10 field staff to maintain signals?

- LTU has (8) field staff to manage the maintenance and (2) office staff to manage the operations of traffic signals

How many components and elements make up a traffic signal cabinet?

- There are (10) major components and hundreds of elements that make up a signal cabinet

How tall is a standard traffic signal head?

- The standard traffic signal head is 42 inches

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Overview

- Discuss what a traffic signals do
- How traffic systems work
- *History of Green Light Lincoln Initiative*
- Questions and Answers

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What Traffic Signals Do

- **Purpose**
  - Keep people safe
  - Prevent conflicting movements
  - Manage traffic, not eliminate delay

- **Key Concept**
  - Only movements that can go safely happen at the same time
  - Signals balances all modes of travel
  - Some waiting is intentional and necessary

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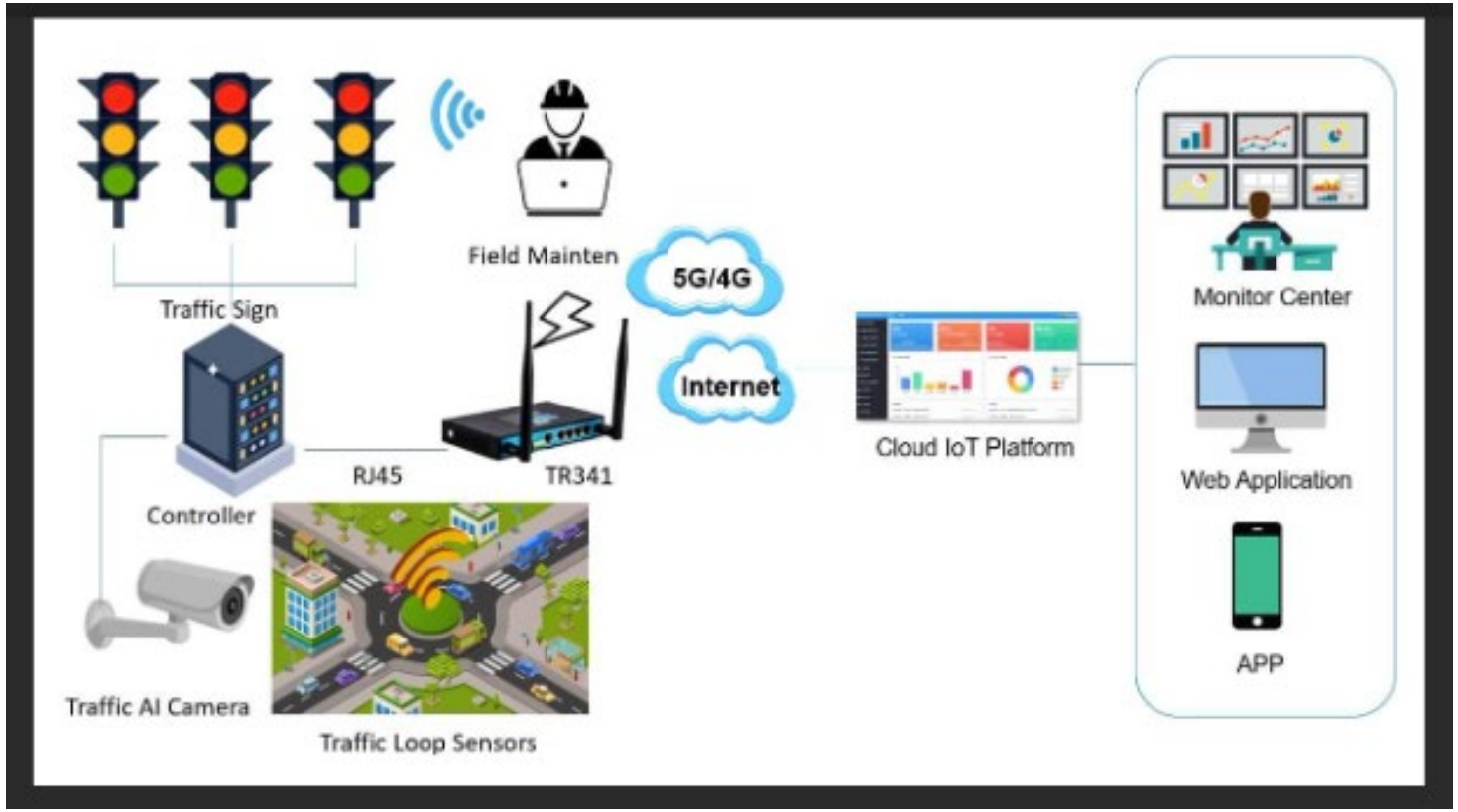
How Traffic Signal Systems Work

Four main parts of a Signal system



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How Traffic Signal Systems Work

Traffic Signals as a Slice of Pie

- **How it works**
  - **(The Whole Pie):** A cycle = one full rotation through all movements
    - The cycle is the time it takes for everyone to get a turn
    - A cycle might be 60, 90, 120 seconds depending on traffic.
  - **(A slice of the pie):** A phase = who gets the green
    - Only movements that don't conflict share the same slice

When the pie is gone, a new pie starts… Over and Over again

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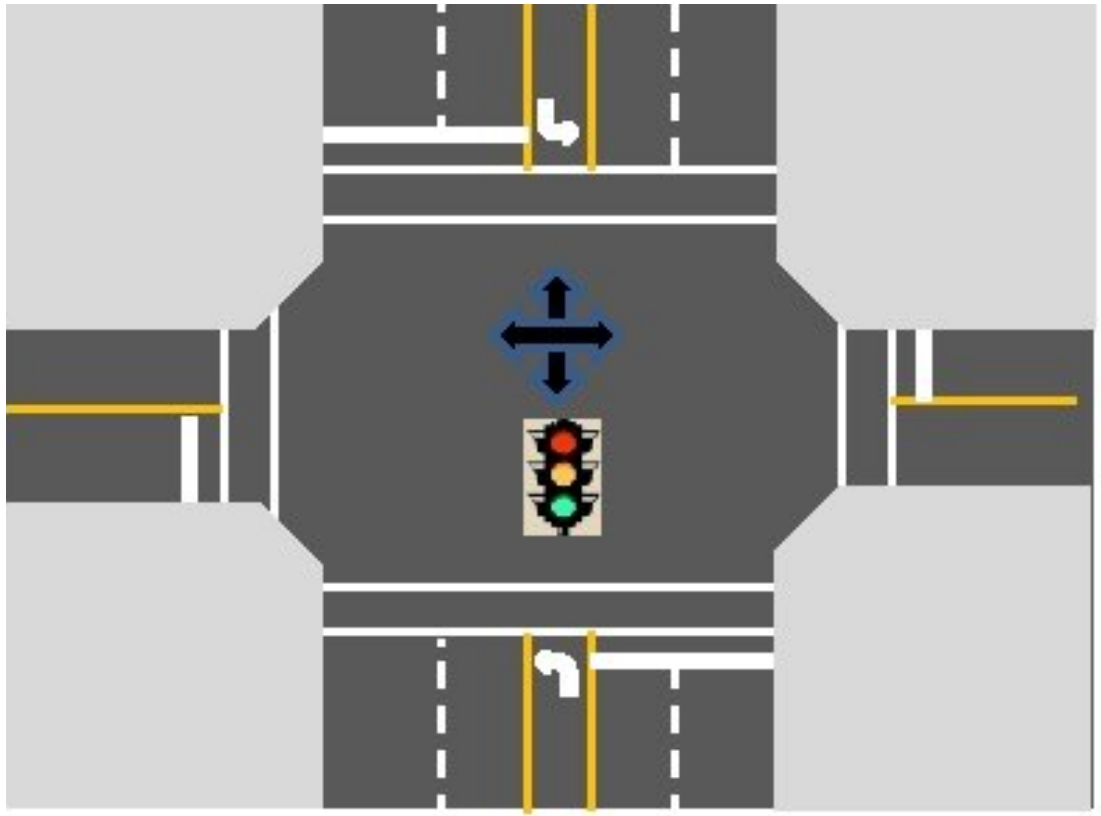

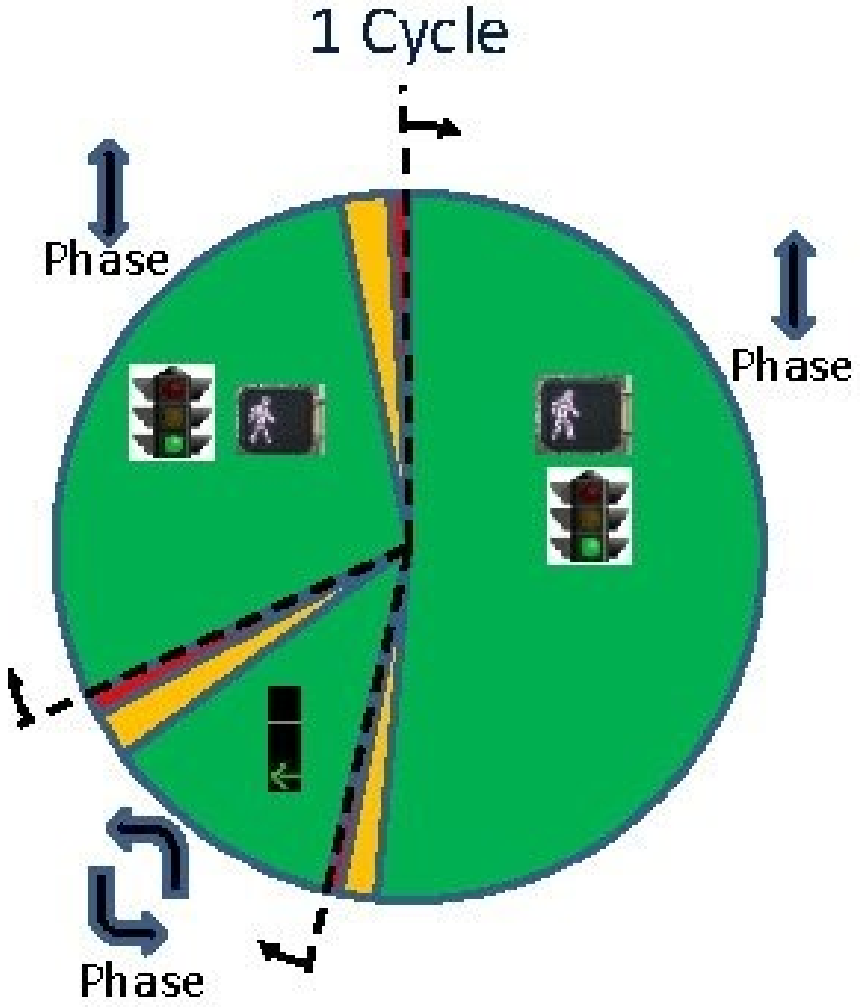

**For educational purposes only, not an actual representation (Example of pie example)*

More than just a red light: What's Happening Behind the Scenes

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How Traffic Signal Systems Work

Big Slices vs Small Slices

- **Not all slices are the same size**
  - Big slices = heavy traffic movements
  - Small slices = lighter traffic movement

- **Engineers change slice sizes based on:**
  - Time of day, Traffic Demand, Pedestrian Needs, Safety Requirements

More traffic = bigger slices, not a different pie

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How Traffic Signal Systems Work

Why You Sometimes Wait

- **If one slice gets bigger:**
  - Other slices get smaller or
  - The whole pie gets bigger (a longer cycle)

- **That's why:**
  - Busy roads may get more green time
  - Side streets and pedestrians may wait longer

Traffic signals don't decide who is important, but how to share the pie safely.

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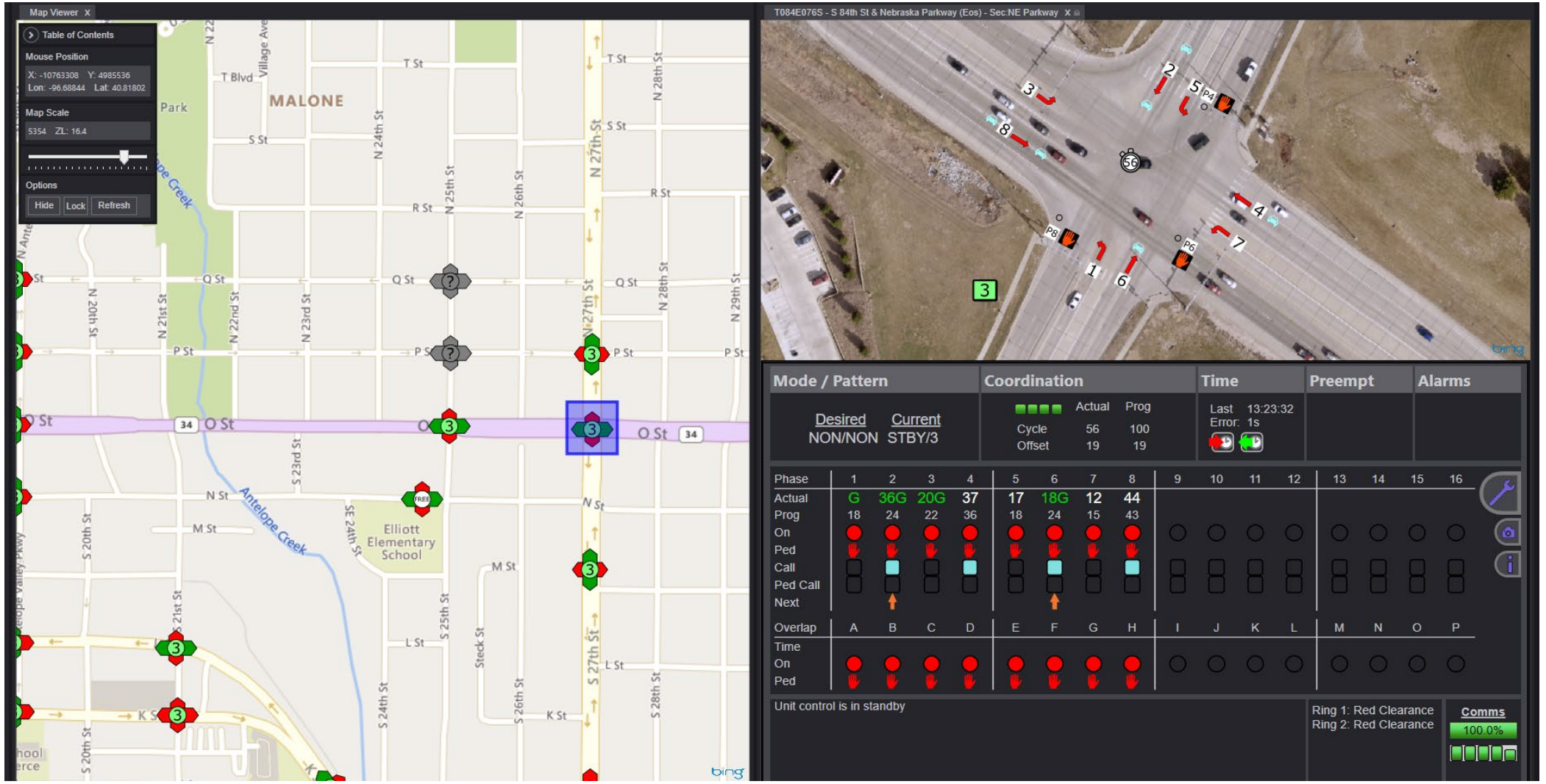

**Centracs System – Central Management Software*

Behind the scenes: How our engineers monitor the system

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**Avigilon System – Traffic Monitoring Cameras*

Behind the scenes: How video detection cameras work

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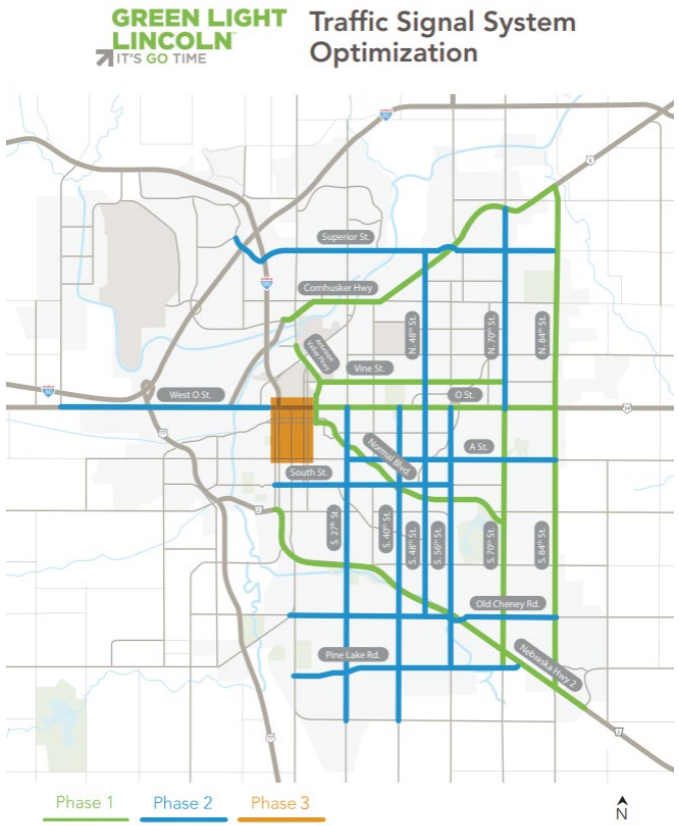
Green Light Lincoln (GL2): Paving the way for a Smarter, Safer Lincoln



- **Modernizing Traffic Signals for More Efficient Future**
  - Website: [Green Light Lincoln – City of Lincoln, NE]

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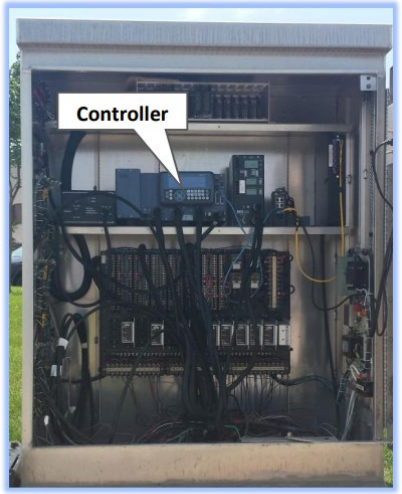
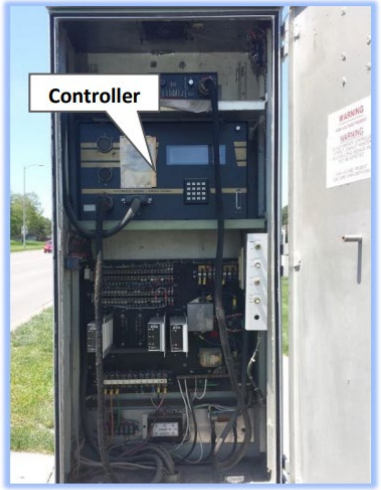
The Problem – Outdated Systems

Before GL2: Aging infrastructure, inefficiencies, and delays

- Outdated central traffic software
- Equipment frequently failed, causing delays, traffic disruptions
- Signal timing didn't reflect current traffic patterns
- Non-standardized signal configurations



NEMA TS-C Cabinet



NEMA TS-A Cabinet

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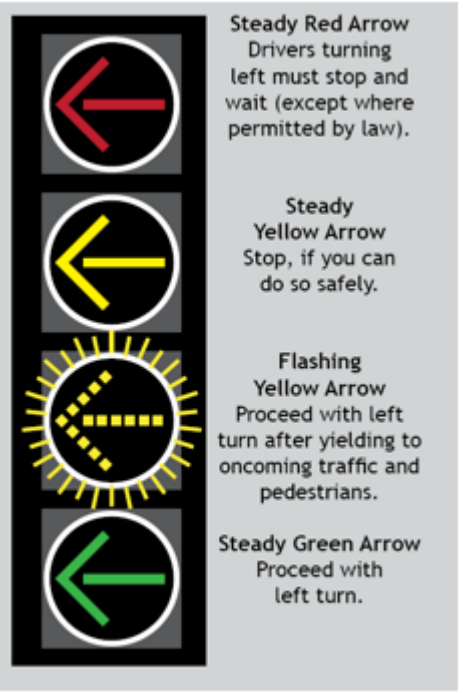
The Solution – Green Light Lincoln

Smart Signals. Smart City.

- City-wide upgrades to 415 intersections
- New software, signal controllers, and cabinets
- Modern features like Flashing Yellow Arrows (FYA)
- City-wide retiming based on real traffic needs



4-Section FYA Indication

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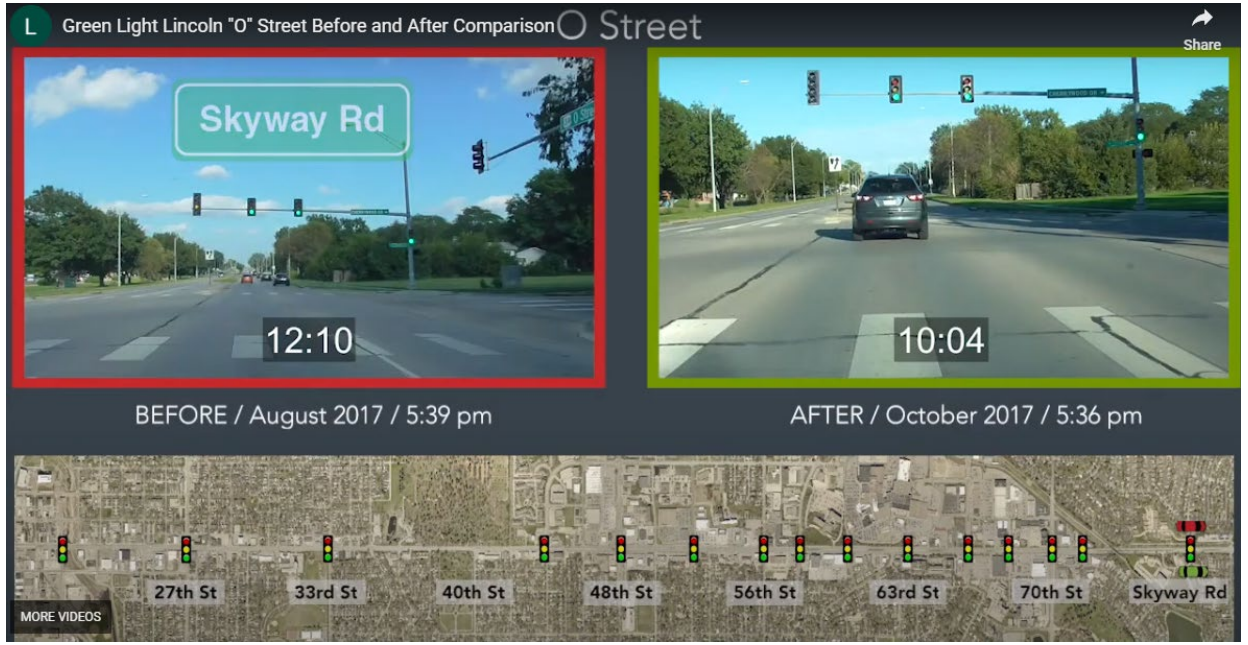
Real Impact – Efficiency, Safety and Savings

Less stopping, More Going

- Reduced travel delays
- Lower fuel consumption
- More reliable equipment
- Better safety and visibility
- Documented cost savings greater than program costs



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Real Impact – Efficiency, Safety and Savings

Annual benefits resulting in signal timing and equipment upgrades

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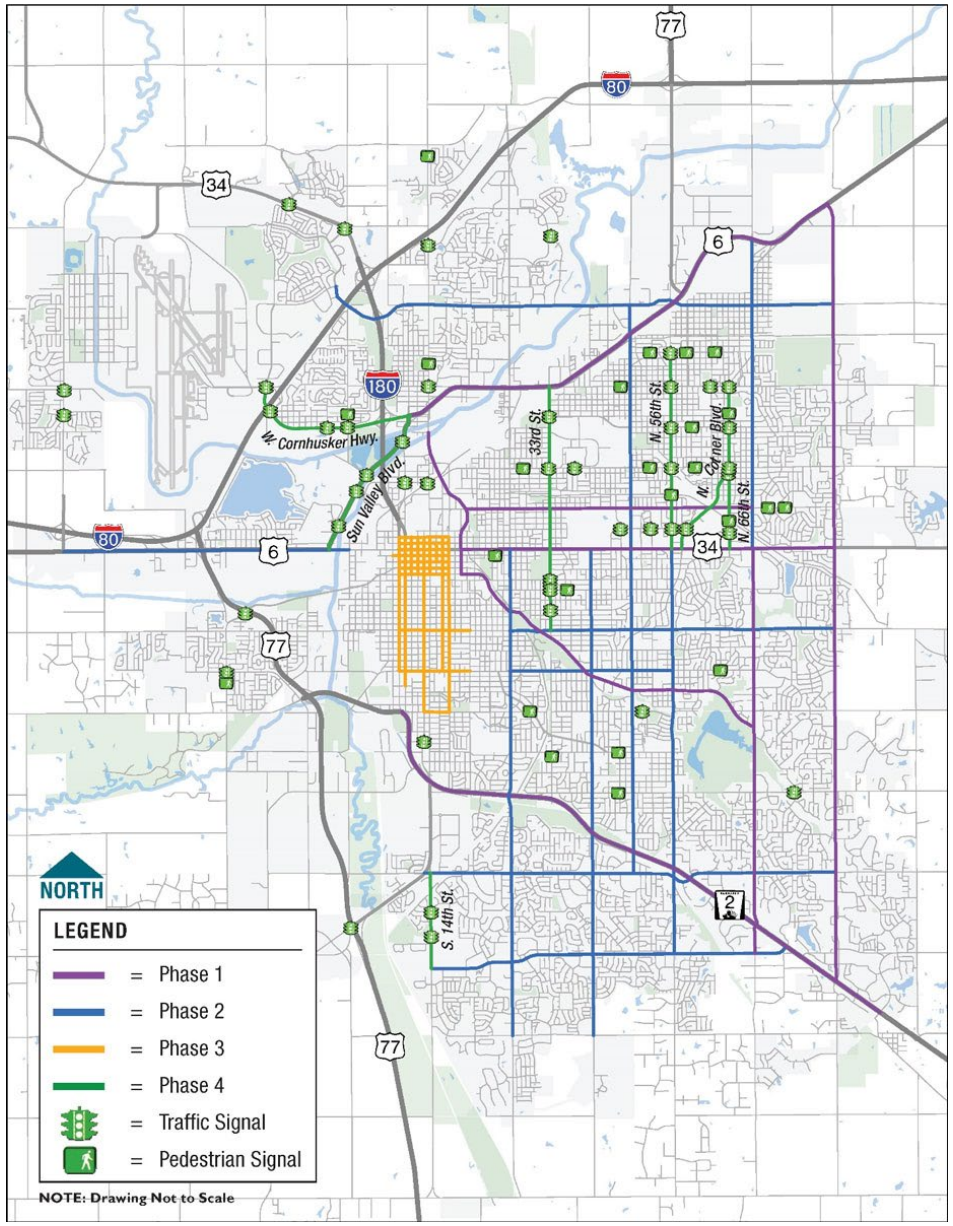

The Long-Term Vision

GL2 was just the beginning

- Retiming every 3-5 years
- Ongoing equipment updates
- Adaptable systems to meet future demands

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Future-Ready Infrastructure

Positioned for Innovation

- Adaptive signal technology ready
- Emergency preemption possible
- Smarter coordination across corridors

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A Green Light for Progress

GL2 was More Than a Project – It was a Long-Term Commitment

- Keeps traffic moving
- Protects long-term investment
- Builds a smarter, safer city

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Questions and Answers

- **What questions do you have?**

- **Most frequently asked questions**
  - Are signals timed with other signals?
  - Are detection cameras used for automated enforcement?
  - Why did we change to flashing yellow arrows?
  - Is there secret to changing the signal by pushing the pedestrian button multiple times?