

# Frequently Asked Questions

**Q: Why can't all the city's traffic lights be timed so I always hit green lights when I'm driving to work?**

**A:** It is mathematically impossible for all of Salt Lake City's traffic lights to be "synchronized" so that you will never hit red lights while driving around the city. Many variables and safety issues must be considered when timing lights and compromises must be made. (see "Key Variables" on reverse side). By driving on one of the streets the City has identified as a priority street for timing purposes, you can get where you need to go faster and minimize safety issues on neighborhood streets (see "Suggested Routes" on back of this brochure).

**Q: What can I do to help our city have more coordinated lights?**

**A:** If you suspect a signal timing problem, please contact the Salt Lake City Traffic Control Center at 535-6530 to report the type of problem, location, direction of travel and time of day it typically occurs. You can also report problems via e-mail at [slc.transplan@slcgov.com](mailto:slc.transplan@slcgov.com). The problem will be evaluated and timing modifications made, where possible.



## Suggested routes

- Redwood Road
- 900 West
- 300 West
- State Street
- 700 East
- 1300 East
- Foothill Drive
- 400 South
- 500 South
- 600 South
- 1300 South
- 1700 South
- 2100 South
- 2700 South

Salt Lake City Division of Transportation  
349 South 200 East  
Suite 450  
Salt Lake City, UT 84111

## Traffic Signal Coordination & Synchronization

*Maximizing safety, while decreasing drive times and increasing convenience*



Salt Lake City  
Division of  
Transportation

# Using partnerships, technology, and continuing adjustments to improve drive times, convenience, and safety

Salt Lake City maintains and operates more than 150 traffic signals. A similar number of signals within the City are on state roads (e.g. State St. and 400 South) and are controlled by the Utah Department of Transportation (UDOT). More than 300 other signals throughout the Salt Lake Valley are controlled by other cities or the county. Recognizing the potential difficulty in coordinating signals due to multiple jurisdictions, Salt Lake City partnered with UDOT, Salt Lake County, the Utah Transit Authority, and many of the other cities to develop a computerized, multifaceted traffic management system called *CommuterLink*.



The partners in *CommuterLink* work together to develop and implement compatible signal timing strategies across jurisdictional boundaries to improve traffic flow throughout the Salt Lake Valley.

## What Has CommuterLink Achieved?

Implementation of the signal coordination portion of *CommuterLink* started in mid-2001. Preliminary studies have shown up to **30% fewer stops** and **20% faster travel times** along tested streets under control of the *CommuterLink* system.

### Morning Commute Period

Street, From-To	Reduced Stops	Decreased Travel Time
700 East, S Temple-900S	16.1%	15.8%
400 South, 300W-900E	31.2%	14.1%
500 South, 700E-500W	13.8%	3.8%
600 South, 500W-700E	12.2%	10.6%
1300 South, 300W-1300E	9.8%	8.1%
1700 South, 300W-1300E	12.0%	18.5%
2100 South, 300W-1300E	16.8%	11.2%

### Evening Commute Period

Street, From-To	Reduced Stops	Decreased Travel Time
State St., N Temple-900S	15.5%	4.3%
400 South, 300W-900E	10.6%	5.4%
500 South, 700E-500W	17.7%	20.1%
600 South, 500W-700E	18.9%	18.8%
1300 South, 300W-1300E	15.7%	7.3%
1700 South, 300W-1300E	5.7%	13.3%
2100 South, 300W-1300E	11.7%	10.2%

**\*Now that the system is in use, continual testing and data collection are underway to keep fine-tuning travel efficiency as the community grows and travel needs change.**



The CommuterLink Control Center

## Traffic Signal Coordination:

### Key variables and challenges

**•Balancing Traveler Convenience:** Many factors influence the ability to "synchronize" lights. Light rail and tools such as left turn arrows improve convenience but make timing cycles more complex and difficult to coordinate.

**•Traffic Signal Type: *Pre-timed signals*** have preset green-yellow-red time intervals that can change at different times of day depending on traffic patterns. ***Traffic actuated signals*** use vehicle detectors and pedestrian push buttons to trigger signals based on demand.

**•Traffic Patterns:** Some streets have vastly different traffic patterns at different times of day (rush hour) or days of the week.

**•Safety:** The shorter the green-yellow-red cycle length, the easier it is to coordinate signals. However, the wide intersections in downtown Salt Lake City necessitate longer cycle lengths to provide sufficient time for pedestrians to cross the street safely.