

Red lights usually unwelcome; Signal timing poses challenges

Unless there's a need to pick up that French fry that was dropped near the gas pedal, drivers typically don't like to sit at red lights. At 93 intersections in Loveland, motorists will encounter a traffic signal.

The major functions of a traffic signal are to assign right-of-way and to maximize safe traffic flow. Accomplishing both goals without drivers seeing red—literally and figuratively—is an ongoing challenge.

With a growing community such as Loveland, the challenge becomes greater. The City has been addressing the challenge for years, and is currently looking ahead five years with an Intelligent Transportation System (ITS) plan that addresses congestion, air quality and traffic flow.

City council has expressed support for the plan that could invest up to \$2.5 million throughout Loveland. One key troublesome corridor and



Loveland's busiest thoroughfare is US 34. As of today, long-term funding sources have not been determined.

In the meantime, Loveland's Traffic Division has been aggressively pursuing federal and state grants. The city recently qualified to apply for one funding opportunity that can cover up to 100 percent of ITS project costs.

The city has already been approved to receive a \$250,000 grant to add new traffic signal controllers and Ethernet
(continued on page 2)

Drill at local airport simulates airline crash

"Mayday, aircraft down"

Not really. First responders from Loveland and around the region participated in a major drill simulating an airliner crash at the dog track just south of the Fort Collins-Loveland Municipal Airport. A large scale drill is required at least every three years for airport certification by the Federal Aviation Administration.



Photo courtesy of Larimer County Sheriff's Department

First responders from many regional agencies participated in a major incident drill last month at the Fort Collins-Loveland Municipal Airport. The drill simulated a deadly crash of an airliner taking off from the airport.

Fire, police, ambulance, hospital, coroner and other personnel from northern Colorado responded as if a jetliner with 148 persons aboard crashed just after takeoff onto the former Cloverleaf dog track property just south of the airport. Loveland Fire and Rescue served as initial responders and assumed command of the incident.

The "aircraft" fuselage broke into three sections, two of which caught fire. Three old buses were used to represent the fuselage parts.

About two dozen high school students were "walking wounded" survivors.

The other passengers were represented by gallon jugs of water. Each jug had a written description taped to its bottom describing the nature of that passenger's injuries.

Safety personnel arrived at the scene minutes after the crash was reported, attacking and dousing the fires and determining needed treatment for the injured. Ambulances transported a total of 45 moderately and severely injured persons to three local hospitals. The drill included 75 fatalities at the scene.

The drill also included arrangements for news media at the scene, information provided to the northern Colorado communities, and arrangements with the airline to notify and assist the families of passengers.

(continued on page 4)

INSIDE

Drug collection day successful

Page 3

Utility boxes transformed

Page 3

Dispatch pursues reaccreditation

Page 3

Crossroads makes
White House list

Page 3

Gingerbread house challenge

Page 4

Holiday Activities

Page 4

Help Santa Cops
brighten holidays

Page 4

Carbon monoxide – the silent killer

Every year, hundreds of people die from carbon monoxide poisoning, often due to the use of common appliances such as fireplaces, furnaces, water heaters, space and portable heaters. As winter approaches, the likelihood of carbon monoxide exposure increases as these appliances come into use.

Despite the increase in media coverage and public information on the dangers of carbon monoxide poisoning, it continues to claim lives. In November, 2008, for example, it took the lives of a family of four who were temporarily staying in a home in Aspen.

In response to tragedies like this, a new law requires the installation of carbon monoxide detectors in all new residential construction as well as all existing single- and multi-family housing units on sale in Colorado as of July 1, 2009.

Even so, many residents are still at risk of carbon monoxide exposure. But there are steps families can take to protect themselves.

Have all gas and other appliances that may emit carbon monoxide checked for proper functioning and ventilation. And install carbon monoxide alarms—widely available at hardware and discount stores—on every floor of the house. Finally, make sure smoke alarms are working and be sure to plan and practice a home escape drill.

For more information on the sources, dangers, signs, symptoms and prevention tips related to carbon monoxide, go to these websites: www.cpsc.gov, www.epa.gov, www.nfpa.gov, and www.carbonmonoxidekills.com, or call Loveland Fire Prevention, 962-2537.

Signal timing poses challenges (continued from page 1)

radios to the system. Also, a new central traffic signal system computer and software were recently funded using stimulus money.

A Traffic Adaptive System for the interchanges with I-25 including the new signals at US 34 is being considered. The system could provide a real-time interactive operation that adjusts signals as needed for traffic conditions. It would use high-speed fiber optic communications cable to connect all signals for the entire length of the route to the central traffic signal system computer.

Even this type of system would still not be perfect. It would also require traffic monitoring cameras at multiple intersections where flow—or lack thereof—can be monitored from a central office or Traffic Operations Center (TOC). From there, manual adjustments by staff could be made for special situations—short item (i.e. a stalled car, fender-bender, or spilled materials) or long-term (visibility issues, surface conditions, construction). Such a system would require staffing one or two shifts per day, perhaps even 24/7.

Current system

Today, the 20 signalized intersections along US 34 all use video camera or magnetic loop detectors and a local computer to maximize the intersection's timing. At the intersections, in-ground sensors create a magnetic field to detect vehicles on side streets and turning at left arrows.

Metal vehicles in sensor areas are recognized by the intersection's computer system and provides green time for those vehicles when it is their turn. If no vehicle is sensed, the cross street green cycle is skipped, enabling US 34 to remain green.

Cameras are also used for detecting vehicles at signals along the corridor. Along US 34, the cameras are used primarily for detecting vehicles waiting for a left-turn arrow. On the cross streets, a camera may detect vehicles awaiting left turns and other movement.

Speaking of cycles, the sensors also detect the presence of bicycles, at least most of them. Some of the new high-tech bikes that are mostly carbon fiber or graphite rather than metal may not be detected. In that case, a cyclist may need to push the pedestrian crossing button to signal the system.

Intersection timing is then coordinated with neighboring intersections. The US 34 corridor through Loveland is divided into east and west zones at Monroe Avenue. The east zone extending to the Centerra Parkway intersection east of the Interstate is the busiest, with US 34 traffic exceeding 45,000 vehicles per day in some areas.

Two different timing routines are programmed for all the US 34 intersections. One program controls the signals from 5 a.m.- 11 p.m., the other covers the lesser traffic nighttime hours.

During prime times, the signals cycle length gives longer green lights to the busy main street, US 34, meaning longer waits for cross street traffic. After 11 p.m., the system changes due to substantially decreased traffic on US 34. The result is less wait time for the cross streets, however, that generally sacrifices coordination between neighboring lights on US 34.

Has the City ever considered switching to blinking lights for late-night traffic? Yes, it has been considered. But it was determined not to be acceptable due to safety considerations for vehicles and pedestrians.

An exception to normal signal cycling may occur when an emergency vehicle activates its emergency traffic signal preemption device. When this happens, Loveland intersections equipped with a 3M Opticom vehicle detection recognize the signal and provide the emergency vehicle with a green light. Afterward, two or three cycles may be required for the system to return to normal operation and get back in step with other signals in the corridor.

Currently, four road surface sensors/weather stations are located along major roads in different parts of town, providing information on roadway temperature and surface conditions. In advance of and during winter storms, the information helps street maintenance operations as well as providing data for traffic technicians monitoring roadway conditions who make intersection or system adjustments as needed.

Constant changes, challenges

As every motorist knows, situations at intersections change all the time. After driving through one intersection, a late-crossing pedestrian or a confused squirrel may be encountered at the next. A construction crew may blocking lanes tomorrow but isn't there today.

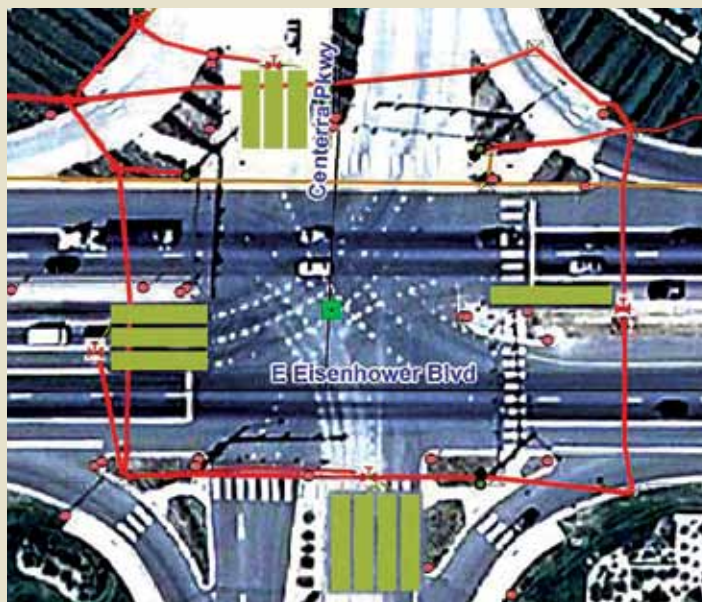
Providing constant green lights consistently for both directions the entire length of Loveland's busier streets just isn't possible. On one-way streets like in downtown Loveland, that's easy. But if lights were timed to achieve that in one direction on a two-way street, motorists traveling in the opposite direction would face red lights again and again.

Different intersections pose different challenges. Perhaps the best example is US 34 at Centerra Parkway. There are great variations in vehicle quantity there. Being adjacent to northern Colorado's busiest I-25 interchange is one challenge, especially during rush hours. Then there's its proximity to busy destinations.

At the Ranch, there may be an all-day event with substantial traffic arriving in the morning and leaving in the afternoon. Or continuous coming and going during the Larimer County Fair and the like.

And there's the shopping center and movie theater attracting traffic at certain hours or certain days for holiday shopping, special events, etc. Topping the list is traffic heading to or especially from a sold-out hockey game or concert at the Budweiser Events Center.

So, next time you're at a red light and not retrieving a French fry, please consider everything that's involved in traffic signal control—both for you and the cross street motorists who probably felt they were waiting forever for their green light, too.



Plenty of cable

This overview head view of the intersection of US 34 and Centerra Parkway illustrates traffic signal control components. The red lines show wiring connecting the signals. The green rectangles represent the vehicle sensors in the pavement.

Drug collection day successful

Nearly 80 pounds of unwanted, unused and often outdated prescription and over-the-counter medications were collected during Loveland's participation in the first annual National Prescription Drug Take-Back Day.

During a four-hour drive-through drop-off set up at the Loveland police building parking lot, police staff assembled the packages that later were given to the Drug Enforcement Agency (DEA) for proper disposal. Collecting the drugs prevented possible addiction, accidents, and overdoses, and prevents drugs from entering waterways where they can affect the chemical makeup of streams, rivers and lakes.

In Colorado, there were 191 collection sites that collected an estimated 8,300 pounds of medication—all in just a four hour period. Nationally, there were 4,094 collection sites (including Puerto Rico and Guam) where an estimated 242,000 pounds of medications were collected.



According to the DEA, residents may have more opportunities for the disposal of medications. A new federal legislation cleared Congress recently, the Secure and Responsible Drug Disposal Act of 2010. The legislation allows DEA to create a process for the public to safely, conveniently and regularly dispose of their prescription drugs. Until then, the DEA will continue to hold nationwide take back days to give citizens the opportunity to safely dispose of unwanted, unneeded medications.

For more information, visit: www.RxDrugsNotYoursNotSafe.org

Dispatch pursues reaccreditation

City of Loveland Dispatch—the 911 staff also known as the Loveland Emergency Communications Center (LECC)—was first recognized in 2007 as an Accredited Center of Excellence through the National Academy of Emergency Dispatch (NAED). LECC was the 116th accredited center for Emergency Medical Dispatch, worldwide and the very first in northern Colorado.

LECC is preparing to apply again for this prestigious accreditation and already has an average compliance rate of 99.33 percent, according to the Academy's standards, placing LECC well above the world-wide average score of other accredited centers who

together rate at 97.74 percent of compliance with standards.

LECC began implementing the NAED protocols in Oct., 1995. Each LECC communications specialist must be certified in the NAED protocols, complete 24 hours of continuing education and recertify every two years.

Use of the protocols has enhanced the service that Loveland dispatchers provide to callers. Additionally, these protocols have provided dispatchers with specific instructions for callers to enable them to perform life-saving techniques including the Heimlich Maneuver, CPR, as well as instructions for assisting with events such as child birth.

Utility boxes transformed all over town

What do tango dancers, tropical frogs, cancer cells and Lake Loveland have in common? These diverse images have become permanent additions to the City's public art collection through the Art in Public Places' Transformations project. Each cabinet is as varied as the artistic styles of the northern Colorado artists chosen to transform 20 outdoor utility cabinets throughout Loveland into unique works of art.

In 2009, Transformations began as a beautification project for downtown Loveland. This year, the commission focused upon utility cabinets along major roadways as a sign that the arts thrive in Loveland. A map showing location and artists' information of all the cabinets is available from the Cultural Arts section of www.cityofloveland.org.



Above: *Cancer Cells* by Angela Canada Hopkins

Below: *Lake Loveland* by Susan Haskins



Left: *Pixels Scales* by Todd Eimen

Crossroads makes White House list

The recently completed improvements at the Crossroads Boulevard and Interstate 25 intersection have made the White House's list of top 100 stimulus funding projects.

The intersection was completed on Aug. 12 and listed No. 12 on the White House's list of most innovative and effective projects nationwide that are not only putting people back to work now, but helping transform the American economy for years to come.

The White House notes that had stimulus funding not helped this project, it would have likely taken another 10 to 20 years to fix the Interchange.

The \$5.5 million project combined \$3 million in Recovery Act funding with money from the Centerra Metropolitan District, which was formed to collect local taxes for the project. It features two large roundabouts on either side of the highway and pedestrian walkways



Newly completed Crossroads interchange at I-25

under the bridge, with expectations that it will handle 24,000 vehicles a day.



Gingerbread house challenge benefits library expansion

A gingerbread house challenge to benefit the renovation and expansion of the library is planned for Dec. 4-5 at the former Mr. Neat's store, 225 E. 4th St.

Sponsored by The Friends of the Loveland Public Library Foundation, creators of gingerbread houses in the following categories are encouraged to enter the competition: Artist: employed in the arts trade, Adult Amateur: not employed in the arts trade, Teen: ages 13-18, and Children: up to age 12. Teams are also welcome.

Entries in each category will be judged and a prize will be awarded in each category. Entry fee is \$10. All entries will be included in a silent auction



open to the public.

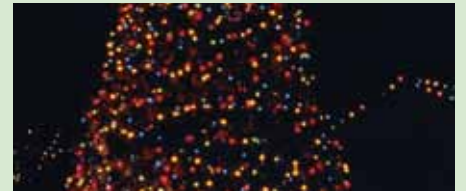
Call George Franke, 970-203-0904 to obtain an entry form and list of rules or pick one up from the Friends' table in the library entry hall.

Holiday Activities at Cultural Services

Annual Holiday Tree Lighting

5 p.m., Sun., Nov. 28, Museum/Gallery—FREE

Bundle up and head to the Loveland Museum/Gallery to watch the lighting of the holiday tree. Enjoy songs of the season and join in on singing holiday favorites. The event will feature the lighting of the tree, free entertainment and refreshments.



'Tis the Season Community Sing-Along

2 p.m., Sun., Dec. 5, Rialto Theater—FREE

Enjoy this wonderful holiday tradition for Loveland. Sing the songs and share the spirit of the season in this audience participation event led by Loveland's own Sharon Sheets. Enjoy a hot drink, a sweet treat and a break from the hectic pace of the holidays.

Film: Christmas in Connecticut

7 p.m., Wed., Dec. 15, Rialto Theater
Tickets: \$6 adult, \$5 senior/student

Laughs, romance and holiday cheer abound in this 1945 classic. Barbara Stanwyck plays Elizabeth Smart, a nationally recognized homemaker and writer for *Smart Housekeeping* magazine. In reality, she's the one who needs a recipe to boil water! Laughs abound as she tries to cover her lack of household skills when her boss invites himself and a recently returned war hero for Christmas dinner.

Loveland Lights

9 a.m. - 5 p.m., Sat. Dec. 4, Loveland Public Library—FREE

The 6th Annual Celebration of Winter Holiday Traditions will include a kids' gingerbread hunt beginning at 9:30 a.m. followed by party food demos, music, decorated trees, displays and a bake sale.

Help Santa Cops brighten holidays

Again this year, there will be drop off locations for Santa Cops donations at Loveland stores and area police stations. Donations of tax-deductible cash or toys (new, unwrapped toys valued under \$20) are always needed.

Santa Cops is a volunteer organization that brightens the holidays by collecting and distributing gifts to area

children who might otherwise not receive any Christmas gifts.

The organization is made up of volunteer representatives from the Loveland Police Department, Fort Collins Police Services, Larimer County Sheriff's Office, Colorado State Patrol, and Colorado State University Police and countless private individuals and businesses.

Together, these volunteers not only strive to provide underprivileged children of Larimer County with a merry Christmas, but promote a positive law enforcement image with these children and their families.

For further information on donations, volunteer opportunities and application schedules, please visit the Santa Cops website; www.santacopslarimercounty.org or call 970 498-5553.



Drill at local airport simulates airline crash (continued from page 1)

An incident drill of this magnitude is required at least every three years for Federal Aviation Authority certification of a public airport. The scope of the drill must be in conjunction with the largest type of aircraft permissible at the airport. The Fort Collins-Loveland airport currently supports commercial jetliners that seat 160 passengers.

Participating agencies included Loveland Fire & Rescue, Poudre Fire Authority, Loveland

Police Department, Loveland Communications, Colorado State Patrol, Larimer County Sheriff's Department, Thompson Valley EMS, Weld County Ambulance, Poudre Valley EMS, McKee Medical Center, Poudre Valley Hospital, Medical Center of the Rockies, Larimer County Coroner and Amateur Radio Emergency Service.

Following the drill, members of all participating agencies gathered to review their efforts. A team of

specialized personnel shared their observations of various facets of the emergency response.

Loveland's public safety personnel are constantly involved in training and drills to prepare for real-life incidents. In February, about 25 Loveland staffers will join 50 other public and private agency personnel from throughout Larimer County for a 5-day disaster training seminar at the federal Department of Homeland Security instructional campus in Maryland.

City Update is a monthly publication of the City of Loveland. Residents receive *City Update* according to their utility billing cycle. Timeliness of the information may be affected by recipients' billing schedule. *City Update* is also available around the first of every month on the News Desk page at www.cityofloveland.org. Your comments are encouraged and welcomed at 962-2302, hillea@ci.loveland.co.us.