

# KIRKSVILLE CITY COUNCIL **NEWSLETTER . . .**

Mari E. Macomber, City Manager  
September 16, 2015

## **SUBJECTS:**

### **WWTP UPDATE**

### **KHPC HISTORIC RESIDENTIAL AND COMMERCIAL TOURS**

### **CITY COUNCIL MENTIONED IN MISSOURI TIMES ARTICLE RE: HB 722**

### **SPRAY INJECTION PATCHER**

### **TEAP GRANT**

### **DEMOLITION COMMUNITY DEVELOPMENT BLOCK GRANT UPDATE**

### **MISSOURI'S LAWSUIT CLIMATE HITS ALL-TIME LOW**

### **FLUORIDE LEVELS IN DRINKING WATER**

### **SIDEWALK REPAIRS**

### **BOWERS SUBDIVISION**

### **MHA GOVERNANCE EXCELLENCE CERTIFICATE PROGRAM**

### **ADAIR COUNTY NURSING HOME DISTRICT FACILITY UPDATE**

## **STUDY SESSION MONDAY**

The Study Session on Monday will be brief and intended to review the Newsletter and the Council Meeting Agenda. This Session will follow an executive session, which will take place at 4:30 in the Council Chambers.

## **WWTP UPDATE**

The Missouri Department of Natural Resources has passed EPA and is now waiting final action by the Clean Water Commission. We have also been informed that construction permit has been issued for signatures. This will allow us to bid the plant project starting September 18 with the bid opening on October 27. It is intended that the bid be awarded at the City Council's November 2 meeting, then submitted to the Missouri Department of Natural Resources for approval. We are still waiting for the due diligence report to be completed, which affects the funding for this project. Should this matter not be resolved by the time the bid is brought to the City Council, the City Council will be asked to approve the bid contingent upon DNR funding of the project.

## **KHPC HISTORIC RESIDENTIAL AND COMMERCIAL TOURS**

This Saturday, September 19, 2015, the Kirksville Historic Preservation Commission (KHPC) will be distributing information for historic residential and commercial tours of Kirksville properties during the 31<sup>st</sup> Annual Red Barn Arts & Crafts Festival. City staff have created informational sheets and brochures for those wishing to participate which will be distributed at a KHPC booth in the Kirksville Arts Center. Please see the informational sheets and brochures attached to this Newsletter.

## **CITY COUNCIL MENTIONED IN MISSOURI TIMES ARTICLE RE: HB 722**

The City Council was mentioned in a September 9, 2015 article in The Missouri Times for their support of Governor Jay Nixon's veto of HB 722. The Missouri Legislature's veto

session took place today, Wednesday, September 16, 2015, as of the preparation of this Newsletter there are no results from the veto session on HB 722. This decision will likely be resolved in the court system due to the likelihood of legal challenges and potential lawsuits.

### **SPRAY INJECTION PATCHER**

Council Member Steele had requested an explanation from the Public Works Department of the spray injection patcher, known as the Dura Patcher, which is a brand name. The spray injection patcher effectively repairs a wide variety of pavement conditions including potholes, deteriorated shoulders, utility cuts, and alligator cracks. Spray injection patcher intergraded operation cleans the area to be repaired, applies a tack coat, in one continuous operation. Using high velocity air, the coated aggregate material is compacted during application, leaving virtually no voids in the final pavement repair and making a long lasting patch that is superior to conventional methods as proven by government studies. The spray injection patcher owned by the City is a 1994 model with over 4000 hours. The blower is weak and the heating blanket is not working properly to maintain oil at 160 degrees. The patcher on hand is so slow that the Public Works Department had to rent a patcher this year to keep up with demand.

### **TEAP GRANT**

The City has applied for a Traffic Engineering Assistant Program (TEAP) grant from the Missouri Department of Transportation (MoDOT). The purpose of the grant would be to evaluate the traffic flow of the streets within the boundaries of the Downtown to determine what makes the most sense, is safest for all modes of transportation, and promotes business in the Downtown. Traffic counts will be collected and analyzed, signage may be reviewed and recommendations given, alternate traffic flows will be recommended. All of this will be based on safety and availability for all modes of transportation, and will consider the flow of traffic to the businesses in the Downtown Business District. The project cost is estimated at \$20,000, with 80% up to \$8,000 covered by MoDOT through the TEAP grant. City staff will update the Council as to the progress of the grant application.

### **DEMOLITION COMMUNITY DEVELOPMENT BLOCK GRANT UPDATE**

As last discussed during the Council Planning Session on September 14, 2015, City staff rejected all bids for the Demolition Community Development Block Grant project. The sole bid received for the demolition of the old Kirksville R-III High School was nearly \$500,000 over budget. This project has been re-bid with a non-mandatory bid tour scheduled for September 30, 2015, and an opening date scheduled for October 13, 2015. This re-bid is being sent to additional businesses that may not have been aware of the initial bid in the hopes of reducing the total cost of the project. City staff will update the Council as progress is made on the project.

### **MISSOURI'S LAWSUIT CLIMATE HITS ALL-TIME LOW**

According to a press release from the U.S Chamber of Commerce's Institute for Legal Reform, Missouri's lawsuit climate ranked at number 42 of the 50 states in the organization's *2015 Lawsuit Climate Survey: Ranking the States*. This is below all the

states that border Missouri with the exception of Illinois. According to corporate attorneys who were surveyed, this makes businesses less likely to relocate to the state of Missouri. The organization cites inaction by the Missouri Legislature as well as action by the Missouri Supreme Court in striking down legal reforms as chief reasons for the ranking.

### **FLUORIDE LEVELS IN DRINKING WATER**

A citizen recently requested that the City lower the amount of fluoride in our drinking water from 1.13 to 0.7 milligrams per liter. This request is based on a U.S. Department of Health and Human Services (USHHS) report stating “The optimal fluoride level in drinking water to prevent tooth decay should be 0.7 milligrams of fluoride per liter of water.” City staff is investigating this further and will discuss potential changes with the City Council.

### **SIDEWALK REPAIRS**

City staff recently contracted repairs to the sidewalk at Franklin and Florence streets. The same damage has occurred on the sidewalk at Scott and Franklin streets. These sidewalks are relatively new. The cracks and heaving that made the repairs necessary are due to natural heating and cooling and could possibly have been prevented through the use of fiber board at more regular intervals. Please see photographs of the sidewalks attached to this Newsletter.

### **BOWERS SUBDIVISION**

As last discussed in the July 15, 2015 Council Newsletter, City staff sent letters to all property owners whose backyards abut a narrow strip of land behind Meadow Lane and Dear Street within the Bowers Subdivision notifying them of the process the City has worked to establish for them to acquire the property. Since that time, of the 29 properties on Dear Street and Meadow Lane, Linda Ranson of Pickell Abstract & Title Company informed City staff that 15 so far have completed the necessary paperwork. She knows of one more who plans to do so.

### **MHA GOVERNANCE EXCELLENCE CERTIFICATE PROGRAM**

City Manager Mari Macomber will be attending the MHA Governance Excellence Certificate Program on November 4, 2015. This is a management training program and was presented to the City Manager as an opportunity from Northeast Regional Medical Center. Macomber currently serves on the hospital board.

### **ADAIR COUNTY NURSING HOME DISTRICT FACILITY UPDATE**

As last discussed in the August 26, 2015 Council Newsletter, the Adair County Nursing Home District is looking to construct a facility to replace their existing Twin Pines Adult Care Center. The District will be applying for funding through the United States Department of Agriculture (USDA) to do so. The District wishes to locate the new facility at the corner of LaHarpe and Jamison Street. Initially there was some question about whether or not this location was zoned appropriately. After review by City staff, the location is appropriately zoned. As such, the City has submitted documents requested by the District assuring that the location itself, along with available utilities, were sufficient for the project. Please see the letter from the USDA requesting this information attached to this Newsletter. City staff will update the Council as more information becomes available.

Attachments:

- KHPC Historic Residential and Commercial Tours
- Sidewalk Repairs
- Adair County Nursing Home District Facility
- CableOne High Speed Internet Rate Increase
- Sales Tax Reports July 2015
- Cape Air Landing Report August 2015
- Google Analytics for City Website August 2015
- Thank You for Forest-Llewellyn Cemetery Tree Planting
- ATSU Named "2015 Great College to Work For" by the Chronicle of Higher Education
- LiDAR Surveying
- Municipalities Turn to Micro-Surfacing for Preventative Maintenance of Roads
- Cities and State Fiscal Structure 2015
- Gun Article from Council Member Moritz

Enclosure

- August Revenue vs. Expense Report

◇ KIRKSVILLE HISTORIC PRESERVATION COMMISSION ◇



**RESIDENTIAL SPACE  
A WALKING TOUR OF EAST TOWN**



**217 East Harrison**      **Masonic Temple**      **Bonsack & Pearce**      **1930**  
 Built to house several Masonic lodges in the area, the Masonic Temple is an ambitious structure. This large-scale, limestone and brick building combines Egyptian Revival and Art Deco styles. Many details refer to Masonic symbolism and history. Others, like the cobras in the pediment and the lotus flowers by the windows, were fashionable – Tutankhamun’s tomb in Egypt had been opened just 8 years before the construction of this building and the last objects removed from that grave in 1930.



**100 North High**      **First Christian Church**      **Anselevicius-Rupe Assoc.**      **1971**  
 This contemporary building seems exotic in a neighborhood of early-twentieth century bungalows and revival-styled houses. The church’s design skillfully arranges broad expanses of brick against crisp gaps for doors, windows, and bells. Similarly the structure sets squared corners next to masses with round corners. Note how the orientation of the bell tower is rotated slightly away from the main building. The interior continues this dynamic, graceful movement of closed and open, squared and rounded, straight and angled.



**300 East Washington**      **First United Methodist Church**      **Cooper, Robinson & Carlson**      **1955**  
 Simple geometric volumes (cubes, triangles) and flattened Gothic Revival elements (shallow buttresses) characterize this mid-century design. This religious compound stands on the site to two separate, earlier Methodist churches. One stood on the east end of the block where the current chapel and bell tower are. The other was at the west end; the education wing stands on that site.



**124 North Mulanix**      **Trinity Episcopal Church**      **Irwin Dunbar**      **1917**  
 Irwin Dunbar, a local architect, gave this small brick church an eclectic design. Both the exterior and interior mix Gothic Revival features (lancet windows in the nave and large Tudor arch windows in the transepts and chancel) with Craftsman elements (exposed rafter tails in the eaves and purlins extending out from the building to support the roof). The interior displays exposed trusses and other striking woodwork.



**407 East Washington**      **Lafayette J. and Maggie Sherwood House**      **1891**  
 This two-story wood frame house and its twin to the west are typical of easily constructed, single family residences built at the end of the nineteenth century to accommodate Kirksville’s growing population. The exterior decoration was limited here to a porch and the flared row of shingles between the first and second stories.



**415 East Washington** **George Edward McGovern House** **c. 1875**

This is an interesting, two-story brick house with long windows, brackets under the eaves, and original gingerbread in the gable ends. The interior retains its original staircase and plaster medallions in some of the ceilings. The McGovern House is one of the three oldest houses left standing in Kirksville; the other two (one on East Pierce and the other on East Burton) also date to around 1875.



**201 South High** **First Presbyterian Church** **Irwin Dunbar** **1922**

Designed by local architect Irwin Dunbar, this church incorporates many elements of the Gothic Revival style – a large west window (cleverly divided to illuminate two different areas on the interior), buttresses, a steep gable roof, etc. The sanctuary contains good, unpretentious woodwork and stained glass. Dunbar also created the Rollins Apartments around the corner; an excellent example of early-twentieth century apartment design in Kirksville.



**704 East Harrison** **David I. and Ella A. Stephenson House** **1926**

One of a number of Colonial Revival styled residences in Kirksville. This example shows most of the traits found in this popular American house style: a symmetrical façade, a small porch frames the main entrance, the front door has side lights and an arched fanlight, small shutters, shallow eaves, a side gabled roof, an entrance hall with a dining room on one side and living room on the other, and a sun porch to extended the living space off to one side. David Stephenson's brother (Bret Harte) lived across the street at 723 East Harrison (built in 1917) in a house that mixes bungalow and Tudor Revival features.



**715 East Harrison** **Charles C. and Teata Givens House** **1916**

Together with the McManis house across the street (708 E. Harrison; 1929) and the Stephenson house next door (723 E. Harrison; 1917), these houses demonstrate variations on the Craftsman style popular in the early twentieth century. The Givens house exhibits exposed rafter tails and knee braces supporting the eaves. It also accommodates early American car culture by extending the porch across the front to become a porte cochere, which protected both a car and its passengers. The McManis house displays interesting stonework on its front porch and porte cochere but that house eliminates visible rafters and braces under the eaves. The Stephenson house has a combined front porch and porte cochere, and has uncovered rafters and braces. However, it also introduces some modest faux half-timbering in the gable end, a detail found in Tudor Revival houses popular in the early twentieth century.



**820 East Harrison** **Fred B. and Carrie E. Tull House** **1924**

A rare instance in Kirksville of a shot-gun house. Modest, narrow houses like this one (designed for deep urban lots) offered people solid, affordable housing. Square houses with pyramidal roofs or small bungalows are more common examples in Kirksville of early-twentieth century economical housing. This example of a shot-gun house illustrates the usual front gable orientation with a porch and a series of rooms extending back from the street.



**904 East Harrison** **Thomas J. and Julia Dockery House** **1892**

The second story of this trim house exhibits a Colonial Revival remodel. The ground floor retains the window and door placement of the house's original 1892 core. The exterior and interior demonstrate a nice combination of late-Victorian and early-twentieth century aspects. The iron fence and double lot size are part of the original 1892 configuration.

◇ KIRKSVILLE HISTORIC PRESERVATION COMMISSION ◇



**COMMERCIAL SPACE**  
**A WALKING TOUR OF DOWNTOWN KIRKSVILLE**



**116-118 North Franklin**

**Kirksville Drug Co.**  
**c.1890**

Like many buildings around the Square and throughout downtown Kirksville, this building is a late-Victorian two-part commercial block. This style featured two revenue generating zones: a major business on the ground floor and rental space on the upper floor for offices, apartments, etc. Large windows on the ground floor let light deep into the interior and allowed pedestrians to see what was for sale inside. This two-story brick example features stylish details like the decorative stonework above the second story windows and the metal cornice, which originally also included a pediment in the center and finials at each end of the roofline. One finial remains on the north end.



**110 North Franklin**

**Palace Bakery**  
**c. 1886**

**108 North Franklin**

**W.A. Goodwin Groceries**  
**c. 1886**

These interesting two-story buildings retain their late-nineteenth century ornamental sheet-metal facades. Often metal facades like these were ordered from catalogues, shipped to the buyer, and attached to a wooden frame.



**101 West Washington**

**Citizens National Bank**  
**Irwin Dunbar 1926**

This elegant two-story stone building replaced a long, narrow brick structure. Local architect Irwin Dunbar angled the corner (just like the much older building across the street at 100 East Washington), set the entrance there, and then gave the bank a strong street presence by using light-colored stone, two-story Ionic pilasters, large openings for windows, and a projecting cornice, which produces a strong shadow line below the balustrade on top.



**100 East Washington**

**Kirkville Real Estate Exchange Building**

**c. 1885**

Among the oldest buildings on the Square, this brick structure is a good, straightforward example of a two-part commercial block. Simple, long window openings are placed at regular intervals. The only ornamental parts of the building are decorative brick work at the top of the second story and, originally, the signage set above the first floor windows and along the roof line.



**115-119 South Franklin**

**Valentine Miller Block**

**1909**

The Miller Building is one of several large, three-story brick commercial buildings constructed in downtown Kirkville around 1910. Among the others were the Foster Building on East Washington (where Beards is now) and a grocery warehouse on North Elson, a location that offered easy access for loading and unloading shipments at the nearby Wabash Railroad Depot.



**201 South Franklin**

**U.S. Post Office**

**James Knox Taylor, Supervising Architect of the Treasury 1905**

One sign of Kirkville's growth as a regional commercial hub was the erection of this brick and limestone post office to handle the high volume of mail through the area. Taylor designed dozens of post offices across the United States. This handsome building has long quoins at the corners, large keystones over the windows, and a steep roof. Originally a cupola capped the building; it was removed in the mid-twentieth century. When built, the post office offered a different street presence in downtown Kirkville: the building was set back from the lot line, rather than being built right up to it, and had a staircase leading up from the public sidewalk.



**202 South Franklin**

**Princess Theatre**

**Irwin Dunbar 1916**

This Mission Revival styled building was one of the first buildings designed by local architect Irwin Dunbar. Commercial cinema had only been around for 19 years when this ambitious theatre was built for films and vaudeville shows. The exterior has been stripped of its towers, marquee, and electric lights set under the eaves. Inside, however, the auditorium is remarkably intact and offers a rare example of early-twentieth century theatre design in Missouri.



**110 East McPherson**

**Kirkville Daily Express Building**

**Bonsack and Pearce 1930**

Enjoyable, geometric, Art Deco designs appear on the main façade of this brick and limestone building. A popular architectural style in the early twentieth century, Art Deco elements can be seen in a few others buildings in Kirkville: in wonderful polychrome terra cotta facades at 108 West Harrison and 112 North Franklin, as well as at the Masonic Temple and Rieger Armory. Although never built, the architects designed this particular building to accommodate additional floors as the local newspaper grew and needed to expand upward.

## Interesting Facts about Kirksville's Historic Sites and Structures

Oldest House in Kirksville?

Oldest Church in Kirksville?

The President of the United States was entertained in what house in Kirksville?

These facts below are just some of the interesting things that the Kirksville Historic Preservation Commission has on file about Kirksville's local sites and structures:

\* Just driving by, you would never know the house you were seeing at 1011 E. Harrison is probably the oldest house in Kirksville that still retains its original recognized form. Called the Rhodes Lowe House, it was supposed to have been built in 1870. Though some houses in town might have been built a few years earlier, none of them are recognizable of their original features. In 1910 it was the residence of Rhodes Lowe, who worked for a law firm. The structure is significant not only for its early date and fine details, but because its design is that of the I-house. It appears to be in excellent condition.

\* J.M. Kennedy House - This house was built in the 1890's by John M. Kennedy at 501 N. Elson Street. Mr. Kennedy started the telephone business in Kirksville. He later sold this business to the Bell Telephone Company. His wife Carrie (Miller) Kennedy, operated the Princess Theater, and after her husband's death, built the Kennedy Theater.

\* Grassle House - Located at 210 S. High, close to the downtown, Fred Grassle built this house in 1900. He was one of the

organizers of the Kirksville Gas Company and was the president of the Kirksville Trust Company. Most of the houses architectural features remain.

\* If you were an African-American in Kirksville in the early 1900's, you may have gone to school at the Lincoln School at 907 S. Wabash Street. Built in 1914, this was the last African-American school in the city. Used until 1954 when segregation was outlawed, it was used for other purposes, eventually converting to a residence in 1955 and used off and on since then for residential living. If you were African-American then, you may have also gone to church at 508 S. Main Street, at the African Methodist Episcopal Church, which is believed to be the oldest church in the City of Kirksville. The church was constructed under the Reverend J.P. Watson in 1878. He was replaced by the Reverend J.H. Smith in 1910, the son of slaves, who came from Macon County. We believe it is still used for church services.

\* The President of the United States was in Kirksville in 1919 at the John R. Kirk House at 603 S. High Street. This house was built about 1890 by John Caskey, who sold it to Dr. John R. Kirk in 1910. Kirk was president of the First District State Normal School, which eventually evolved into Truman State University. Kirk lived there until his death in 1937. William Howard Taft, the 27th U.S. President and the 10th Chief Justice of the Supreme Court, was entertained in this house in 1919. All three floors of the house have been extensively remodeled into apartments. All of the historical features of the house have been all but obliterated. The foundation stones which can be seen and the core of the house are mostly original and all that remain.

\* Pickler House or The Castle - 502 S. Franklin St. - This house was constructed by Samuel M. Pickler in about the 1880's. He was a member of the faculty at State Normal School. He was editor of the Kirksville Journal newspaper until 1881. He was

elected to the Missouri State Legislature 4 times. The house had a distinctive round turret, which partially remains today. Many original exterior features remain. The house is now apartments.

\* Hoyes House or Dodson House - 505 S. High St. - This house may have been constructed in 1860, and if so, would be the oldest house in Kirksville, but we don't know. In 1874 it was sold to David/Daniel J. Hoyer and was valued at \$3,000. Was probably built by Isom or Isham Dodson. Dodson was sheriff of Adair County from 1847 to 1851. David/Daniel Hoyer was the owner from 1874 to 1899. His daughters Ima and Emma converted it to a boarding house after their parents died. It has been used as apartments ever since. Has been recently remodeled.

\* Bowcock Park - A little known gem of an old park is still existing in Kirksville at 1801 N. Luther Street. A memorial of Catalpa trees, planted on private land by Jim Bowcock in the 1920's was to commemorate each Adair County soldier killed in World War I. Jim Bowcock was known as the "Ice King" of Kirksville as he cut blocks of ice from his pond in the winter, stored them, and then delivered ice during the summer months. Neighborhood ladies, mostly mothers of these deceased sons, had a park sign with pictures of each son who was killed and kept it up for many years. These pictures are still at the Adair County Historical Society. The very tall trees have been ravaged by storms over the last several years but many trees still live. The property is still privately owned.

\* Pickell House - 214 S. High - The Pickell house is one of the oldest in Kirksville. Parts of the house may have been built in 1866 for John L. Porter, one of the leading citizens of the town. A Union man during the Civil War, at the Battle of Kirksville, he established a temporary hospital in one of his buildings on the north side of the square to care for the wounded. The house was purchased by Ralph Pickell in 1931.

\* Yes, there is a Red Barn. Located on the Truman State University Campus, east of Franklin Street, just south of the intersection with Patterson Street. Built in 1916, the Red Barn has been a fixture in our area, and was a barn on a small farm that was in this location.

\* These are just a few of the homes and interesting sites in Kirksville that have historic value and stories behind them of people who were prominent in the City, and others who just built good homes. The Kirksville Historic Preservation Commission has meetings each quarter, the first Wednesday of January, April, July, and October, at 4:00 p.m. in the council chambers at City Hall, 201 S. Franklin Street. All of our meetings are open to the public, and we would welcome anyone that would like to come and participate! We are on the Kirksville city web site also.

THANKS for coming to the 2015 Red Barn Arts & Crafts Festival!







United States Department of Agriculture

August 18, 2015

REC'D AUG 21 2015

MS MARI MACOMBER  
KIRKSVILLE CITY MANAGER  
201 S FRANKLIN  
KIRKSVILLE MO 63501

Dear Ms. Macomber:

The United States Department of Agriculture, Rural Development, has received an application for financial assistance for the construction of a new facility for the Adair County Nursing Home/Twin Pines. We are required to complete an environmental assessment for the requested assistance. Information regarding the request is as follows:

**Applicant:** Adair County Nursing Home District dba: Twin Pines Adult Care Center

**Project Description:** The project consists of construction a new facility. The 90 bed facility will be approximately 40,000 square feet.

**Location of Project:** Northwest corner of LaHarpe and Jamison Streets.

Attached to this letter are copies of an aerial photograph and city street map showing the property location. We are requesting any information you may have regarding the effect this project may have.

Please respond to:                   USDA Rural Development  
  Attn: LouAnn Rongey  
  2410 S Franklin  
  Kirksville, MO 63501

If you have any questions, please feel free to contact me. We are attempting to meet a funding deadline on this project so your prompt attention would be greatly appreciated.

Thank you for your assistance in this matter.

Sincerely,

LOUANN RONGEY  
Area Specialist

Attachments

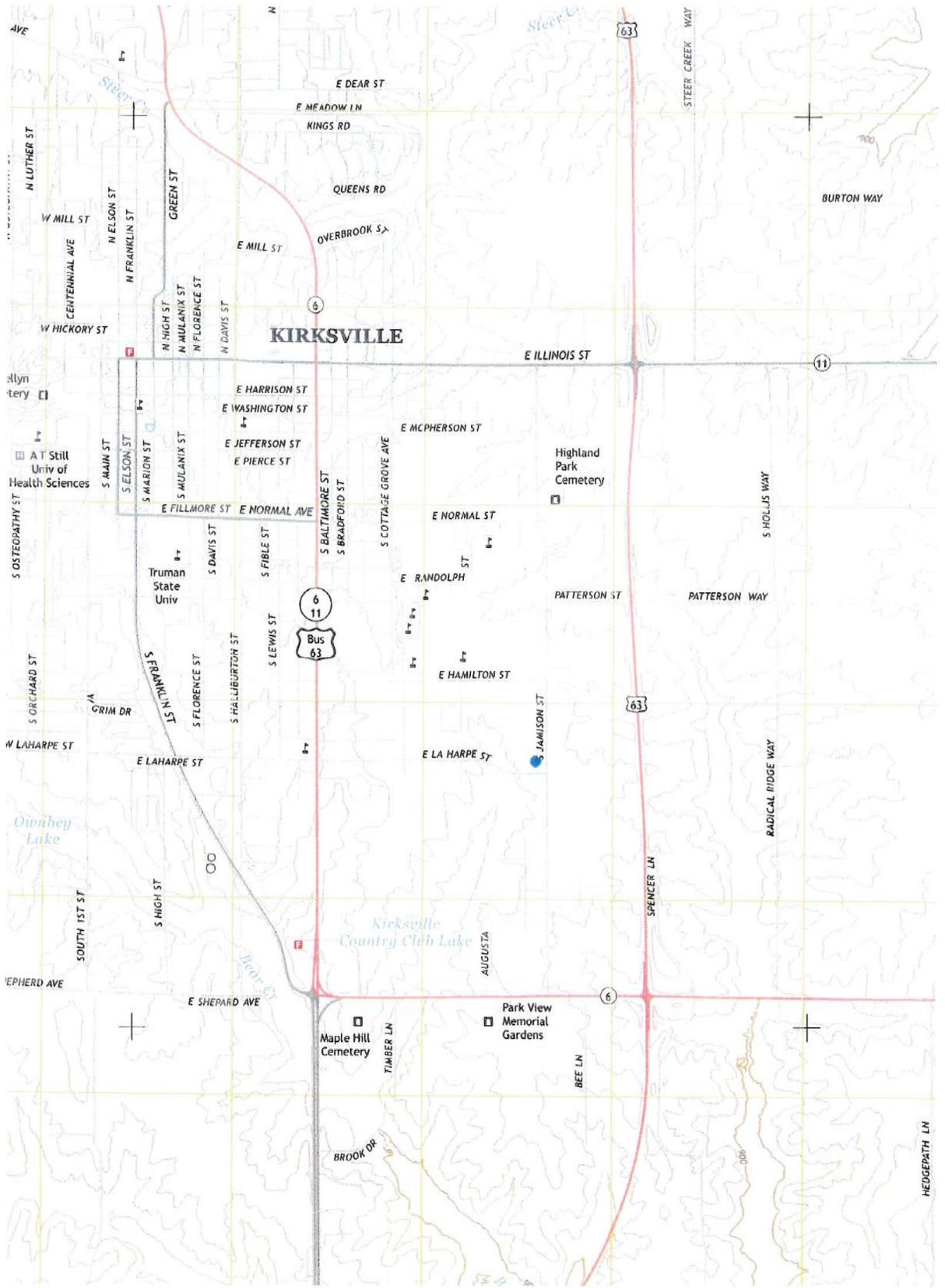
**Rural Development - Kirksville Office**  
2410 S Franklin St, Kirksville, Missouri 63501  
Voice (660) 665-3274 • Fax (855) 842-0825

USDA is an equal opportunity provider and employer.

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form (PDF), found online at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at [program.intake@usda.gov](mailto:program.intake@usda.gov).

Laharpe & S Jamison St  
Laharpe & S Jamison St, Kirksville, MO 63501





August 28, 2015

Mari Macomber  
201 S. Franklin St.  
Kirksville, MO 63501

REC'D SEP 4 - 2015

Dear Mari,

We want to take a moment to inform you of an upcoming adjustment to Cable ONE's internet rate structure in Kirksville.

At Cable ONE, we strive to keep rates reasonable for our customers, and have not adjusted our High Speed Internet rates in nearly 5 years. From time to time, however, it is necessary to adjust fees in order to keep pace with the costs of providing service.

Over the last several years, we have made significant upgrades to our network in order to continue to provide our customers with the fastest and most reliable internet service at a reasonable price. As a result of these investments and the increased cost of providing High Speed Internet service, effective with our October 2015 billing period, our High Speed Internet rates will increase by \$5 per month. Current customers who are on a promotional rate are excluded from this rate adjustment during the term of their promotion.

We value our partnership with the city of Kirksville and we will continue to provide our customers with the latest products and technical advancements, while maintaining the highest level of reliability and customer care. We recently announced that we will be doubling the speeds of our 50Mbps, 75Mbps, and 100Mbps plans in October. In addition, Cable ONE will invest \$67 million in 2015 on network upgrades and enhancements – the first step in providing 1 Gigabit service to residential customers. The company plans to announce residential 1 Gigabit markets next month.

We recognize that we have a responsibility to our customers and the communities where we do business, and we will continue to ensure that we are the kind of company that our communities are proud to call a neighbor.

Please feel free to contact us with any questions or concerns you may have.

Sincerely,



Martin Stitzer  
Cable ONE General Manager  
660-627-2138  
martin.stitzer@cableone.biz



FOR IMMEDIATE RELEASE

## Cable ONE Doubles Internet Speeds

**August 20, 2015 - Phoenix, AZ** – [Cable ONE](#) announced today that it will double downstream speeds for new and existing residential High Speed Internet customers in more than 90 percent of its markets beginning October 2015.

The company will double speeds on the following services: the Streaming 50Mbps plan will double to 100Mbps; the 75Mbps Premier plan will double to 150Mbps; and the 100Mbps Ultra Plan will double to 200Mbps.

"As customers continue to stream, download, and connect across multiple devices, we know that speed is key in satisfying this growing demand," said Joe Felbab, Vice President of Marketing for Cable ONE. "Doubling our speeds will create more customer value and provide a superior High Speed Internet experience for our customers."

Cable ONE will invest \$67 million in 2015 on network upgrades and enhancements – the first step in providing 1 Gigabit service to residential customers. The company plans to announce residential 1 Gigabit markets next month.

"Our continued investment in improving and expanding our network enables us to deliver the fastest, most reliable internet connections at the best value and allows us to continue on our roadmap to offering gigabit speeds to our residential customers," Felbab said.

Cable ONE High Speed Internet was recently ranked by *PC Magazine* as one of the top 10 fastest Internet Service Providers (ISP) in the nation for the fourth year in a row. Cable ONE was also ranked by Netflix as one of the top ISPs for delivering the best Netflix experience to customers and Google rated [Cable ONE's High Speed Internet](#) "YouTube HD Verified" for providing consistent and stable HD (720p) streaming without interruption or buffering.

New customers can take advantage of 100Mbps speed for just \$35 per month for the first three months of service beginning in October 2015.

###

### About Cable ONE

Serving nearly 700,000 customers in 19 states with high speed Internet, cable television, and telephone service, [Cable ONE](#) provides consumers a wide range of the latest products and services, including wireless Internet service, High-Definition programming, and phone service with free, unlimited long distance calling in the continental U.S. More information - [www.cableone.net](http://www.cableone.net)

### CONTACT:

Trish Niemann  
Cable ONE Public Relations Director

**SALES TAX COLLECTIONS**

**One-Cent General Sales Tax**

	2010	2011	2012	2013	2014	2015	2015 YTD Growth/-Loss Comparison to				
							2014	2013	2012	2011	2010
<b>BUDGET</b>	<b>2,466,000</b>	<b>2,476,280</b>	<b>2,523,820</b>	<b>2,588,620</b>	<b>2,637,920</b>	<b>2,782,890</b>					
January	259,347.52	177,293.93	231,297.39	268,619.22	242,229.90	294,636.78	21.64%	9.69%	27.38%	66.19%	13.61%
February	200,778.78	259,901.05	229,342.20	206,324.87	213,352.25	231,484.74	8.50%	12.19%	0.93%	-10.93%	15.29%
March	156,669.64	160,805.35	147,321.44	135,401.12	197,231.68	128,624.36	-34.79%	-5.00%	-12.69%	-20.01%	-17.90%
April	232,500.31	258,496.85	288,635.98	288,365.52	245,043.46	286,296.98	16.84%	-0.72%	-0.81%	10.75%	23.14%
May	233,120.21	239,462.58	216,676.28	243,679.88	319,462.38	268,677.58	-15.90%	10.26%	24.00%	12.20%	15.25%
June	143,943.57	149,702.34	141,482.89	137,532.65	139,439.84	144,889.39	3.91%	5.35%	2.41%	-3.22%	0.66%
July	265,660.28	259,437.07	285,063.79	299,328.74	259,978.98	276,215.36	6.25%	-7.72%	-3.10%	6.47%	3.97%
August	208,953.81	218,429.47	203,154.15	196,827.86	246,801.56						
September	131,838.50	174,444.14	162,346.70	197,662.39	179,717.22						
October	252,020.17	270,826.30	264,153.60	264,869.77	281,688.36						
November	207,549.97	223,163.42	209,821.80	216,670.23	244,937.29						
December	199,574.20	159,898.86	177,081.78	188,952.81	166,734.36						
<b>TOTAL</b>	<b>2,491,956.96</b>	<b>2,551,861.36</b>	<b>2,556,378.00</b>	<b>2,644,235.06</b>	<b>2,736,617.28</b>	<b>1,630,825.19</b>	<b>-40.41%</b>	<b>-38.33%</b>	<b>-36.21%</b>	<b>-36.09%</b>	<b>-34.56%</b>
<b>VARIANCE from BUDGET Growth/(Loss)</b>	<b>25,956.96</b>	<b>75,581.36</b>	<b>32,558.00</b>	<b>55,615.06</b>	<b>98,697.28</b>	<b>(1,152,064.81)</b>					
	2,491,956.96	2,551,861.36	2,556,378.00	2,644,235.06	2,736,617.28	1,630,825.19					
				<b>Amended Budget</b>	2,769,043.00						
				<b>Variance (Loss)</b>	<b>(32,425.72)</b>	1,630,825.19					

SALES TAX COLLECTIONS											
1/2-Cent Economic Development Sales Tax											
	2010	2011	2012	2013	2014	2015	2015 YTD Growth/-Loss Comparison to				
BUDGET	1,208,610	1,238,140	1,261,910	1,279,163	1,359,960	1,307,620	2014	2013	2012	2011	2010
January	120,629.29	85,289.72	106,319.67	123,086.03	109,278.12	133,639.19	22.29%	8.57%	25.70%	56.69%	10.79%
February	94,738.04	119,191.04	108,595.67	96,917.30	98,401.39	108,234.24	9.99%	11.68%	-0.33%	-9.19%	14.25%
March	75,660.91	75,145.16	73,294.33	66,517.25	94,521.06	63,022.37	-33.32%	-5.25%	-14.01%	-16.13%	-16.70%
April	111,043.36	123,657.91	137,601.31	134,781.29	115,153.79	132,291.20	14.88%	-1.85%	-3.86%	6.98%	19.13%
May	113,459.81	115,552.14	104,128.45	116,088.24	151,563.58	130,668.64	-13.79%	12.56%	25.49%	13.08%	15.17%
June	71,562.71	74,772.94	69,846.97	68,273.27	69,259.51	71,968.76	3.91%	5.41%	3.04%	-3.75%	0.57%
July	125,457.62	121,737.17	134,281.22	141,657.83	125,493.28	129,869.52	3.49%	-8.32%	-3.29%	6.68%	3.52%
August	100,267.58	104,086.50	97,048.04	97,448.25	115,108.78						
September	64,600.41	85,700.82	79,800.20	94,162.64	88,870.10						
October	122,354.30	129,064.24	125,444.41	125,217.88	134,040.01						
November	100,293.80	106,591.45	100,920.32	104,309.69	117,150.64						
December	94,262.91	77,056.78	87,889.14	92,986.07	82,432.90						
<b>TOTAL</b>	<b>1,194,330.74</b>	<b>1,217,845.87</b>	<b>1,225,169.73</b>	<b>1,261,445.74</b>	<b>1,301,273.16</b>	<b>769,693.92</b>	<b>-40.85%</b>	<b>-38.98%</b>	<b>-37.18%</b>	<b>-36.80%</b>	<b>-35.55%</b>
<b>VARIANCE from BUDGET Growth/(Loss)</b>	<b>(14,279.26)</b>	<b>(20,294.13)</b>	<b>(36,740.27)</b>	<b>(17,717.26)</b>	<b>(58,686.84)</b>	<b>(537,926.08)</b>					
	1,194,330.74	1,217,845.87	1,225,169.73	1,261,445.74	1,301,273.16	769,693.92					
				<b>Amended Budget</b>	1,301,170.00						
				<b>Variance (Loss)</b>	103.16	769,693.92					

SALES TAX COLLECTIONS											
1/4-Cent Capital Improvement Sales Tax											
	2010	2011	2012	2013	2014	2015	2015 YTD Growth-Loss Comparison to				
							2014	2013	2012	2011	2010
<b>BUDGET</b>	<b>636,140</b>	<b>619,070</b>	<b>630,955</b>	<b>621,790</b>	<b>629,743</b>	<b>653,860</b>					
January	60,321.62	42,654.08	53,168.78	61,555.22	54,654.06	66,819.41	22.26%	8.55%	25.67%	56.65%	10.77%
February	47,373.58	59,595.62	54,297.80	48,458.31	49,200.78	54,116.96	9.99%	11.68%	-0.33%	-9.19%	14.23%
March	37,830.34	37,572.42	36,646.97	33,258.85	47,260.77	31,511.43	-33.32%	-5.25%	-14.01%	-16.13%	-16.70%
April	55,521.89	61,828.87	68,800.89	67,390.34	57,576.87	66,145.47	14.88%	-1.85%	-3.86%	6.98%	19.13%
May	56,725.39	57,776.21	52,064.46	58,047.79	75,757.14	65,334.66	-13.76%	12.55%	25.49%	13.08%	15.18%
June	35,781.46	37,386.59	34,923.47	34,136.51	34,629.84	35,985.58	3.91%	5.42%	3.04%	-3.75%	0.57%
July	62,729.01	60,868.81	67,140.45	70,829.86	62,746.76	64,934.82	3.49%	-8.32%	-3.29%	6.68%	3.52%
August	50,134.10	52,043.23	48,524.12	48,724.47	57,554.59						
September	32,300.12	42,850.45	39,900.26	47,081.11	44,435.17						
October	61,177.23	64,532.14	62,722.37	62,609.22	67,020.07						
November	50,146.96	53,698.45	50,460.08	52,154.71	58,575.31						
December	47,131.61	38,528.47	43,944.70	46,493.29	41,216.37						
<b>TOTAL</b>	<b>597,173.31</b>	<b>609,335.34</b>	<b>612,594.35</b>	<b>630,739.68</b>	<b>650,627.73</b>	<b>384,848.33</b>	<b>-40.85%</b>	<b>-38.98%</b>	<b>-37.18%</b>	<b>-36.84%</b>	<b>-35.56%</b>
<b>VARIANCE from BUDGET</b>											
<b>Growth/(Loss)</b>	<b>(38,966.69)</b>	<b>(9,734.66)</b>	<b>(18,360.65)</b>	<b>8,949.68</b>	<b>20,884.73</b>	<b>(269,011.67)</b>					
	597,173.31	609,335.34	612,594.35	630,739.68	650,627.73	384,848.33					
				<b>Amended Budget</b>	650,610.00						
				<b>Variance (Loss)</b>	17.73	384,848.33					

SALES TAX COLLECTIONS											
1/2-Cent Transportation Sales Tax											
	2010	2011	2012	2013	2014	2015	2015 YTD Growth-Loss Comparison to				
BUDGET	1,272,280	1,238,140	1,261,910	1,239,620	1,259,487	1,307,730	2014	2013	2012	2011	2010
January	120,637.22	85,308.17	106,337.62	123,110.89	109,307.74	133,639.13	22.26%	8.55%	25.67%	56.65%	10.78%
February	94,746.83	119,191.19	108,595.52	96,917.27	98,401.28	108,233.98	9.99%	11.68%	-0.33%	-9.19%	14.23%
March	75,661.05	75,145.01	73,294.29	66,517.15	94,521.57	63,022.39	-33.32%	-5.25%	-14.01%	-16.13%	-16.70%
April	111,043.15	123,657.82	137,601.32	134,781.30	115,153.66	132,291.35	14.88%	-1.85%	-3.86%	6.98%	19.14%
May	113,451.22	115,552.90	104,128.69	116,095.57	151,514.25	130,668.62	-13.76%	12.55%	25.49%	13.08%	15.18%
June	71,562.61	74,773.02	69,846.79	68,273.27	69,259.42	71,971.63	3.92%	5.42%	3.04%	-3.75%	0.57%
July	125,457.80	121,737.11	134,281.29	141,659.90	125,493.24	129,869.56	3.49%	-8.32%	-3.29%	6.68%	3.52%
August	100,268.06	104,086.49	97,047.92	97,448.67	115,108.81						
September	64,600.41	85,700.82	79,800.32	94,162.60	88,869.95						
October	122,354.25	129,064.29	125,445.04	125,217.74	134,039.98						
November	100,293.67	107,396.30	100,920.34	104,309.57	117,150.81						
December	94,262.96	77,056.53	87,889.24	92,986.88	82,433.01						
<b>TOTAL</b>	<b>1,194,339.23</b>	<b>1,218,669.65</b>	<b>1,225,188.38</b>	<b>1,261,480.81</b>	<b>1,301,253.72</b>	<b>769,696.66</b>	<b>-40.85%</b>	<b>-38.98%</b>	<b>-37.18%</b>	<b>-36.84%</b>	<b>-35.55%</b>
<b>VARIANCE from BUDGET Growth/(Loss)</b>	<b>(77,940.77)</b>	<b>(19,470.35)</b>	<b>(36,721.62)</b>	21,860.81	41,766.72	<b>(538,033.34)</b>					
	1,194,339.23	1,218,669.65	1,225,188.38	1,261,480.81	1,301,253.72	769,696.66					
				<b>Amended Budget</b>	1,301,220.00						
				<b>Variance (Loss)</b>	33.72	769,696.66					

**SALES TAX COLLECTIONS**

**Local Use Tax**

	2013	2014	2015	2016	2017	2018	2015 YTD Growth/-Loss Comparison to				
<b>BUDGET</b>	<b>0</b>	<b>405,000</b>	<b>423,275</b>				<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
January	16,424.79	35,605.91	38,586.20							8.37%	134.93%
February	22,176.37	29,411.71	33,241.09							13.02%	49.89%
March	38,961.62	39,440.36	42,354.16							7.39%	8.71%
April	39,744.48	32,257.19	22,666.11							-29.73%	-42.97%
May	45,212.51	39,949.47	36,430.23							-8.81%	-19.42%
June	35,284.16	38,278.98	33,158.02							-13.38%	-6.03%
July	38,288.10	40,878.57	37,196.21							-9.01%	-2.85%
August	19,495.90	48,006.60									
September	45,839.16	43,628.60									
October	27,951.09	29,447.19									
November	22,907.73	33,019.94									
December	56,177.96	46,130.48									
<b>TOTAL</b>	<b>408,463.87</b>	<b>456,055.00</b>	<b>243,632.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>-46.58%</b>	<b>11.65%</b>
<b>VARIANCE from BUDGET Growth/(Loss)</b>	<b>408,463.87</b>	<b>51,055.00</b>	<b>(179,642.98)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>					
	408,463.87	456,055.00	243,632.02	0.00	0.00	0.00					
<b>Amended Budget</b>	<b>382,500.00</b>	<b>417,560.00</b>									
<b>Variance (Loss)</b>	<b>25,963.87</b>	<b>38,495.00</b>	<b>243,632.02</b>								

<b>SALES TAX COLLECTIONS BY FISCAL YEAR</b>	
<b>Community Improvement District 1-Cent Sales Tax</b>	
<b>FY 2015</b>	
<b>Budget</b>	85,000.00
<b>Actual Collections:</b>	
<b>January</b>	11,565.24
<b>February</b>	8,096.31
<b>March</b>	2,562.69
<b>April</b>	7,334.82
<b>May</b>	12,869.13
<b>June</b>	2,288.67
<b>July</b>	11,427.29
<b>August</b>	
<b>September</b>	
<b>October</b>	
<b>November</b>	
<b>December</b>	
<b>Total Tax Collections</b>	\$56,144.15
<b>Variance</b>	
<b>Growth/(Loss)</b>	<b>(\$28,855.85)</b>
<b>Amended Budget</b>	
<b>Amended Growth/(Loss)</b>	\$56,144.15

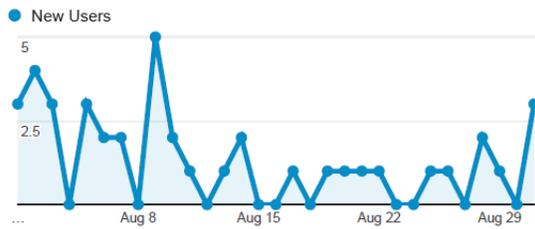
<b>IRKLAND</b>					
Invoice: LAND0815					
52000 MID IRK STN		Listed below is the landing weight report of _____ CAPE AIR _____			
<b>For the Month of : August 2015</b>					
<b>TYPE OF AIRCRAFT</b>	<b>NUMBER OF LANDINGS</b>	<b>CERTIFIED WEIGHT EACH LANDING</b>	<b>TOTAL CERTIFIED LANDING WEIGHT</b>	<b>LANDING FEE RATE PER LANDING</b>	<b>MONTHLY LANDING FEE</b>
Cessna 402	91	6,850	623,350.00	\$40.00	\$3,640.00
			0	\$40.00	\$0.00
			0	\$40.00	\$0.00
			0	\$40.00	\$0.00
<b>TOTAL</b>	91	6,850	623,350		\$ 3,640.00

My Dashboard

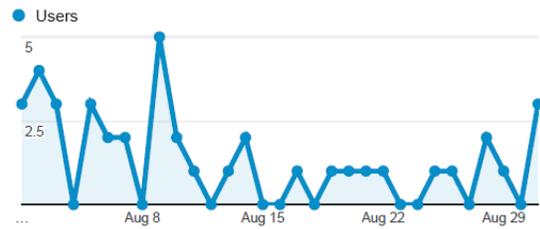
Aug 1, 2015 - Aug 31, 2015

All Sessions  
100.00%

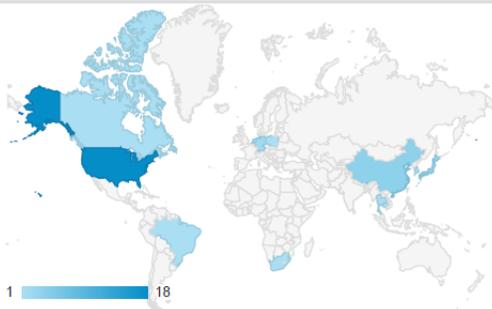
New Users



Users



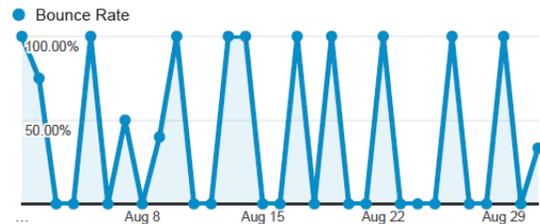
Sessions



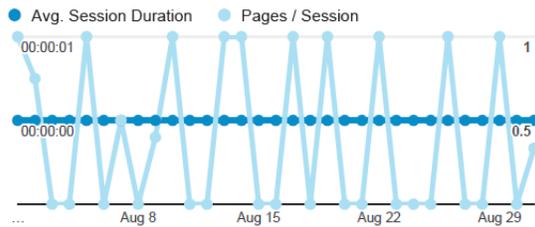
Sessions by Browser

Browser	Sessions
(not set)	25
Firefox	16

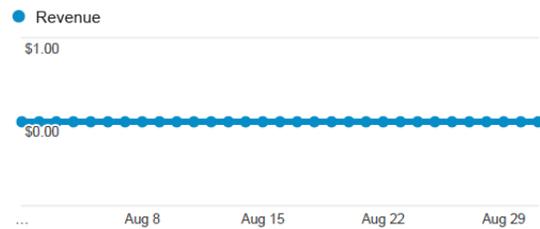
Bounce Rate



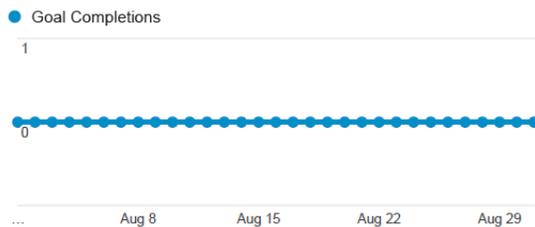
Avg. Session Duration and Pages / Session



Revenue



Goal Completions

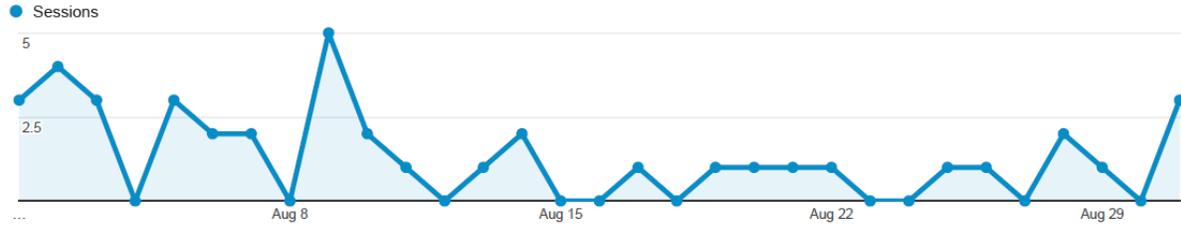


## Audience Overview

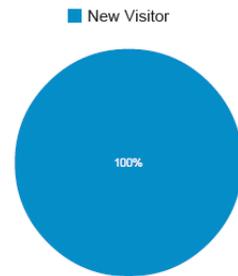
Aug 1, 2015 - Aug 31, 2015

All Sessions  
100.00%

Overview



<p>Sessions</p> <p>41</p>	<p>Users</p> <p>41</p>	<p>Pageviews</p> <p>23</p>
<p>Pages / Session</p> <p>0.56</p>	<p>Avg. Session Duration</p> <p>00:00:00</p>	<p>Bounce Rate</p> <p>56.10%</p>
<p>% New Sessions</p> <p>100.00%</p>		



Language	Sessions	% Sessions
1. en-us	25	60.98%
2. en	15	36.59%
3. (not set)	1	2.44%

August 30, 2015

Dear Mari,

"Thank You" doesn't say it all,

but at least it starts

to let you know how very much

your kindness touched our hearts.

We want to thank you & the  
City for providing & planting the  
redbud tree on our family's  
plot at Forest - Glenelg. It  
means so much to us.

Dwight & Lerna

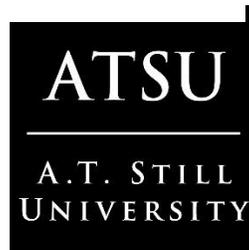
## FOR IMMEDIATE RELEASE

Date: July 20, 2015  
Contact: Karen Scott  
A.T. Still University  
[kescott@atsu.edu](mailto:kescott@atsu.edu)  
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## ATSU named “2015 Great College to Work For” by The Chronicle of Higher Education

MESA, Ariz. and KIRKSVILLE, Mo. – (July 20, 2015) – [A.T. Still University of Health Sciences](http://www.atstu.edu) (ATSU) is one of the best colleges in the nation to work for, according to a new survey by *The Chronicle of Higher Education*.

The results, released today in *The Chronicle's* eighth annual report on The Academic Workplace, are based on a survey of 281 colleges and universities.

In all, 86 of the 281 institutions achieved “Great College to Work For” recognition for specific best practices and policies. Results are reported for small, medium, and large institutions, with ATSU included among the medium universities with 3,000 to 9,999 students.

ATSU won honors in two categories including work-life balance, and compensation and benefits.

“It is a tremendous honor to be recognized for such a distinguished tribute. ATSU is devoted to our internal community and we are committed to fostering an environment where employees feel valued, empowered, and supported both in and outside of the workplace,” said ATSU President Craig M. Phelps, DO.

The survey results are based on a two-part assessment process: an institutional audit that captured demographics and workplace policies from each institution, and a survey administered to faculty, administrators, and professional support staff. The primary factor in deciding whether an institution received recognition was the employee feedback.

“The institutions that the Great Colleges program recognizes provide innovative educational experiences – while also offering their employees outstanding workplace experiences – and we are eager to help readers learn more about them,” said Liz McMillen, *The Chronicle's* editor. “The selection process is

rigorous and being named to the list is a tremendous accomplishment, but it also positions colleges and universities well to recruit the people that make them a success.”

To administer the survey and analyze the results, *The Chronicle* worked with ModernThink LLC, a strategic human capital consulting firm that has conducted numerous “Best Places to Work” programs, surveying hundreds of thousands of employees nationwide.

#### **About A.T. Still University**

Founded in 1892 as the nation’s first college of osteopathic medicine, A.T. Still University provides graduate level education in whole person healthcare. Recognized internationally for its integrated approach, ATSU equips students with the knowledge, compassion, and hands-on experience needed to address the body, mind, and spirit. The University comprises Kirksville College of Osteopathic Medicine, College of Graduate Health Studies, Missouri School of Dentistry & Oral Health, Arizona School of Dentistry & Oral Health, Arizona School of Health Sciences, and School of Osteopathic Medicine in Arizona.

#### **About The Chronicle of Higher Education**

*The Chronicle of Higher Education* is the No. 1 professional source for news, jobs, and information for college and university administrators and faculty. *The Chronicle* provides institutions with multiple paths to effectively communicate and engage with the largest audience and most influential decision makers in higher education in print and online. Visit <http://chronicle.com> to learn more.

###

# LiDAR SURVEYING

## DELIVERING INCREASED SAFETY AND EFFICIENCY ON PUBLIC WORKS PROJECTS

by Bob Gilbert

The roots of surveying trace all the way back to ancient Egypt and the Great Pyramid of Khufu. Today more and more technology is being integrated into the profession, to the benefit of both surveyors and those ultimately using the survey data.

One such example of survey technology is Light Detection and Ranging (LiDAR). A LiDAR scanner gives surveyors the ability to measure complex areas more quickly, accurately, and safely than traditional methods of survey.

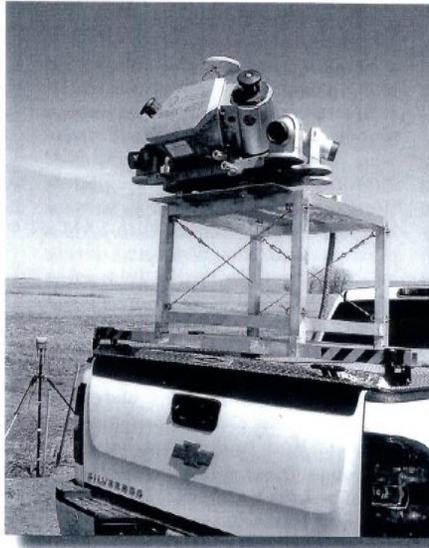
LiDAR equipment quickly captures very detailed data by using the reflection time of rapid pulses of laser light to map a surface. LiDAR refers to a remote sensing technology that emits intense, focused beams of light and measures the time it takes for the reflections to be detected by the sensor. This information is used to compute ranges, or distances, to objects. It allows for development of precise, realistic, three-dimensional representations of roadways, railroads, bridges, and buildings.

After collection, the raw point data is processed to deliver the information in the form of contours and surfaces for use in standard design programs.

### TYPES OF LiDAR

LiDAR is collected from ground-based static, mobile, or aerial platforms.

- **Static (Stationary):** Ground-based, static LiDAR systems are used for close-range, high-accuracy applications, such as bridge and dam monitoring, facilities inventory, erosion mapping, and manufacturing. Ground-based LiDARs pulse at rates up to 1,000 Hz, and can map objects from two meters up to 1,000 meters away, with accuracies of millimeters to a few centimeters.



The mobile scanner offers extremely high measurement rates and provides dense, accurate, and feature-rich data at high-driving speeds.

- **Mobile:** A ground-based, mobile scanner offers extremely high measurement rates and provides dense, accurate, and feature-rich data at high driving speeds. Mobile LiDAR is perfect for applications like mapping roadways and rail corridors, as well as extended urban and vacant areas. This unit provides measurements at a rate of up to 1.1 million per second, and can measure objects from 1.5 meters away with accuracy of a few millimeters.
- **Aerial:** Aerial LiDAR allows for rapid surveying over large areas with accuracy of down to five centimeters. Uses for aerial imagery, include: monitoring and managing environmental change; planning for towns; and determining optimal route location and design for major infrastructure projects. This technology can measure 10 to 80

points per square meter, and can capture hundreds of square miles in a single day.

### SAFETY AND EFFICIENCY

Traditional means of survey only allow for an educated best guess in some instances. Safety concerns can hinder highly accurate measurements of roadways and stockpiles. Transmission lines and as-built indoor facilities are difficult to measure using traditional survey methods.

LiDAR technology allows surveyors to obtain highly-detailed information about terrain and mass in ways never before possible. The density of the gathered data set from one trip can save the need for additional survey work if plans are altered or additional information is needed.

"Traditional survey methods still have their place on many public works projects, but in certain instances, such as on high-traffic roadways when the safety of the survey crew is a factor, LiDAR provides us the ability to capture extremely detailed survey-grade information quickly while mitigating safety risks," said Herb Bailey, a project engineer at the Jefferson City-based engineering and technology firm Bartlett & West. "For example, since LiDAR works off of surface bounce-back, we have the option to scan a roadway at night if we are looking to capture the details of the roadway during a lighter traffic time. This helps keep the survey crews off the road while getting accurate measurements to take into the design program."

### HIGHWAY 5 NIGHTTIME SIDEWALK MAPPING

One such example of performing LiDAR work at night to minimize disruption of traffic flow and increase safety was the Missouri Department of Transportation's (MoDOT) mapping

and survey of Highway 5 in Lebanon, Missouri. In November 2012, MoDOT used Bartlett & West to establish horizontal and vertical survey controls; survey utility locations; design a survey of the project corridor; and provide base mapping for the project.

With a tight time frame, unknown weather delays and a high-traffic area, the firm decided the design survey would be completed using a Terrestrial LiDAR scanner made by Riegl. The horizontal and vertical control was set with Global Positioning System (GPS) technology utilizing the MoDOT Global Positioning System Reference Station Network. Utility locations were tracked utilizing the Missouri One Call system. The utility mapping was completed using GPS technology and Robotic Total Stations. Field crews worked through the overnight hours to minimize traffic delays to the public, obstructions to the scanner, and to keep the crew out of harm's way.

#### MODOT AERIAL ROAD MAPPING

Another example of MoDOT utilizing LiDAR services is a statewide aerial LiDAR program that was completed in 120 days between March

and July of 2014. In this case, Bartlett & West partnered with Surveying and Mapping (SAM) of Austin, Texas, to provide aerial LiDAR services for eight Missouri Department of Transportation (MoDOT) mapping projects. The projects ranged from widening and shouldering projects to relocations, and from two-way rural projects to four-lane urban freeways. Two of the projects were in the St. Louis area, two in southeast Missouri, two in central Missouri and two in the Kansas City area.

SAM provided the aerial scan using a helicopter that was trucked rather than flown in to minimize mobilization costs. All eight projects were flown and scanned during four days in the same week. Bartlett & West's survey manager provided quality assurance controls to SAM's office in Austin that were used during calibration of the aerial data. SAM submitted the calibrated data on each project to Bartlett & West's processing team in Topeka, Kansas.

As data sets were collected, processing team members were able to extract and classify topographic features and to create a basemap

complete with contours. These features were extracted from the LiDAR data using specific software.

"The benefits of using LiDAR rather than a traditional survey for these MoDOT projects include our ability to minimize human exposure to fast moving traffic; the thoroughness of the point data we are able to collect; and the accuracy of that data," said Bailey.

LiDAR can reduce costs on certain complex projects and be used to provide design-ready digital data deliverables efficiently. "LiDAR isn't the solution for every survey project," Bailey said. "Yet, when it fits, the technology really provides innovative solutions." □

**Bob Gilbert** is a professional engineer and the location manager for Bartlett & West's Jefferson City, Missouri, office. He has served as project manager, quality control/quality assurance reviewer, technical advisor, and project engineer on projects ranging from storm and sanitary sewer projects, roadway and roundabout projects, and facility improvements involving pumping, lighting, and control systems throughout the surrounding communities.

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## MUNICIPALITIES TURN TO MICRO-SURFACING FOR PREVENTATIVE MAINTENANCE OF ROADS

by Doug Rada

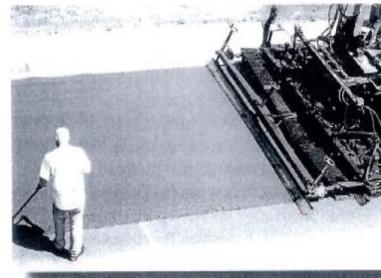
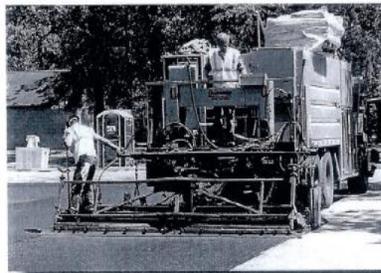
**A** looming nightmare for cash-strapped municipalities is discovering that road maintenance costs will skyrocket due to much-needed rehabilitation.

To avoid a catastrophic hit on budgets, more and more Missouri municipalities are turning to preventative maintenance in the form of a paving product developed in Germany in the 1960s - micro-surfacing. It's a mere three-eighths of an inch surface application to roads, but communities are finding that it can prolong the life of roads by as much as 10 years, avoiding a convergence of major road repairs in any one fiscal year. Like investing in a yearly dental checkup, communities such as Branson, Joplin, Osage Beach, Clayton, Creve Coeur, St. Charles and more have opted for corrective measures to extend the life cycle of pavement. For every dollar spent on micro-surfacing, a city can save four to five dollars in major road rehabilitation costs in the future.

In considering micro-surfacing as a preventative maintenance solution, municipalities must first evaluate the conditions of their roads. The pavement should be in relatively good to very good condition. Roads are rated on a scale of one to 10. Those suitable for micro-surfacing should rate at least six or better. Roads with significant cracking or sunken sections that are accelerating to the end of its life cycle and likely to undergo a sub-grade failure, require a more intense overhaul and is not suitable for micro-surfacing.

For roads in sufficiently good condition, micro-surfacing is an effective sealant to protect the road and its sub grade. Comprised of a dense-graded aggregate, water, asphalt emulsion and mineral filler, it is applied in the following manner:

- The surface must be prepared and cleaned of debris and oil spots and any vegetation working its way into pavement;



- Significant cracks three-eighths of an inch or larger must be filled to ensure water won't penetrate the pavement; and
- The micro-surfacing product is then mixed into a specialty paver and applied to the surface. No compacting is required.

If applied properly, the pavement should be open to traffic within one hour. A mile of micro-surfacing can be done in approximately three hours in the morning with the road open to traffic around noon. That's a far better prospect for citizens who sometimes

have to navigate a month-long detour or longer for a complete pavement overhaul. In addition to extending the life cycle of the road by another seven to 10 years, micro-surfacing provides other advantages, such as:

- Improved driving conditions, including increased skid resistance;
- Controlled oxidation, providing a clean, "newly paved," look; and
- Prevention of gravel from chip and seal projects from damaging vehicles.

In addition, micro-surfacing also is an effective strategy for municipal airports, extending the runway life cycle while improving skid-resistance and mitigating loose gravel that can damage engines.

In using micro-surfacing as part of long-range budget planning, cities typically rate their roads to properly sequence micro-surfacing as a remedy to put off complete rehabilitation. For example, a municipality with 15 roads to maintain might have five rated six to seven, another five rated eight to 10, and another five rated only fair at five or less. While those roads rated five or less will have to be rehabilitated, municipal leadership can plan to adopt a micro-surfacing schedule that addresses roads in poorer condition soonest, and address the roads in better condition as needed in the future.

Road rehabilitation is often a burdensome cost for municipalities. But by extending the life cycle of roads by seven to 10 years through micro-surfacing, municipalities can avoid fiscal crisis when several roads need to be overhauled in any one year. □

**Doug Rada** is general manager of Microsurfacing Contractors, LLC, a division of Byrne & Jones Construction, St. Louis' largest commercial paving contractor.

# CITIES AND STATE FISCAL STRUCTURE 2015:

## A COMPARATIVE ASSESSMENT OF STATE AND LOCAL FISCAL SYSTEMS

The fiscal systems of cities are defined by the states in which they are located. These systems can create an environment that either allows municipalities to fund their share of resident needs and to thrive economically, or constrains the ability of cities to balance budgets and deliver basic services.

The latest *Cities and State Fiscal Structures* report, provided by the National League of Cities' Center for City Solutions and Applied Research, examines how the key components of these systems (fiscal authority, revenue reliance/capacity, state aid, and tax and expenditure limitations) are structured across states.

**1. Fiscal Authority:** Municipal fiscal authority is a city's access to general taxes on sales, income, and property. We rate municipalities as having authority if they have an option to levy the tax, local option to control the tax rate (within some increment; they have some ability to shift the rate), and if the revenues are for general use (e.g., not earmarked for specific uses). No state uniformly authorizes its municipalities to utilize all three tax sources.

**2. Revenue Reliance and Capacity:** Municipal revenue reliance is the proportion of revenues that a municipality generates from its own sources for general use. It determines whether a city's fiscal policy decisions

can impact its fiscal direction. We examine the share of general fund revenues derived from local sources, including major taxes (property, sales, income), fees and charges (since fees and charges are usually set locally). On average, U.S. municipalities derive approximately 71 percent of their general fund revenues from own-source revenues, including 24 percent from property taxes, 13 percent from sales taxes, 3 percent from income taxes and 32 percent from fees and charges.

**3. State Aid:** State aid is the share of general revenue from state sources. On average, state aid makes up 17 percent of city general fund revenues.

**4. Tax And Expenditure Limits:** Voter- or state-imposed (constitutional

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or statutory) tax and expenditure limitations (TEs) require that local governments tax or spend according to state regulations. There are two types of TEs that we examine those that constrain the property tax in particular and those that constrain overall revenue spending increases. Currently, 41 states impose some form of a TEL on their municipalities.

**SUMMARY**

With these criteria in mind, several states stand out as “ahead of the pack,” or provide their cities with a greater degree of local authority than other states.

Alabama and Missouri both provide some municipalities with a higher level of local authority, namely by allowing Alabama municipalities and Missouri’s two largest municipalities authorization to levy an income tax in addition to the local property and sales tax. More local authority is, however, offset by low levels of state aid relative to other states and, for Missouri, a potentially binding TEL also figures into the mix.

New York and Pennsylvania also appear to be ahead of the pack. Although New York has a potentially binding TEL, the state does provide additional local authority to a significant sector of the state’s population through granting New York City and Yonkers the authority to levy income taxes. Similarly, Pennsylvania provides some additional local authority through the sales tax provided to Philadelphia (no other municipality in the state is permitted to levy a sales tax), its state aid level is particularly high, but it has a potentially binding TEL.

Due to their broad-based tax bases, municipalities in Ohio, Kentucky, and Washington are placed in the “ahead of the pack” category as well. Moreover, even though all three operate under “potentially binding” property tax limitations, the effect is in large part mitigated by the broad tax base. In this regard, municipalities in these states are less likely to adjust tax or assessment issues because the tax bases are flexible and broad. Municipalities in states whose tax bases are narrow might be inclined to adjust their revenues by tinkering with the property tax system; the municipalities in these three states have more options. Hence, we place them in the “ahead of the pack” group.

Our assessment of “behind the pack” municipalities places considerable

weight on local authority and reliance in combination with low ratings on one of the other factors. For example, a group of states are characterized by low authority and reliance in combination with a potentially binding TEL (Idaho, Maine, Massachusetts, New Jersey, and Rhode Island). Another set of states are characterized by low levels of authority, reliance, and state aid (North Carolina, Oregon), or low levels of authority, reliance, and capacity (Connecticut and New Hampshire). West Virginia perhaps has the most constrained combination, with low levels of authority, reliance, state aid, and the presence of a potentially binding TEL.

**CONCLUSION**

Compared with the 2008 analysis of cities and state fiscal structures, the lack of change in each of the four structure components is striking given radical economic shifts that have ensued, but not wholly unexpected. Local fiscal health remains below pre-recession levels despite burgeoning broader economic recovery in part because authorization of more local revenue authority and other enhanced capacity measures to allow cities to leverage local economic vitality are rare.

The full Cities and State Fiscal Structures report can be viewed at

[file:///H:/Review,%20Misc,%20Board%20and%20Article-Photos/Misc/NLC\\_CSFS\\_Report\\_WEB.PDF](file:///H:/Review,%20Misc,%20Board%20and%20Article-Photos/Misc/NLC_CSFS_Report_WEB.PDF).

The previous analysis conducted in 2008 can be viewed at <http://www.nlc.org/Documents/Find%20City%20Solutions/Research%20Innovation/Finance/cities-state-fiscal-structure-2008-rpt.pdf>. □

*This summary article was reprinted from the National League of Cities' website at <http://www.nlc.org/find-city-solutions/city-solutions-and-applied-research/finance/cities-and-state-fiscal-structure>.*

## The Quieter Gun Death Toll

The grisly carnage from mass shootings regularly attracts the nation's focus as a public safety issue, if only fleetingly. But the highest death toll from guns by far continues to be the far less noticed wave of suicides — nearly 20,000 a year — by Americans whose easy access to guns presents an irresistible temptation in a critical moment of despair.

Suicide accounts for two-thirds of the 30,000-plus gun deaths each year, as more than half of all suicides are carried out by firearms, according to the latest federal data.

If it takes a sensational statistic to spur national concern about such self-destruction, consider the latest research showing that 82 percent of teenage suicides by firearms involve guns left poorly secured or foolishly unprotected by members of their families. These young lives are impulsively lost in supposedly safe home environments, where just the presence of a gun has been found to increase the risk of suicide three times, according to a new report by the Brady Center to Prevent Gun Violence, a gun safety organization.

The report also notes that 85 percent of people attempting suicide by gun succeed, while drug overdose, the

main method chosen for suicide attempts, is fatal only 2 percent of the time. Ninety percent of those who fail in a suicide attempt embrace their second chance at life and do not eventually die by suicide.

There is stark evidence that easy access to guns compounds the crisis. The states with the five highest rates of gun suicides have gun ownership rates notably higher than the national average, according to the Brady study. Meanwhile, the gun lobby and firearm industry are engaged in a reckless campaign to have more Americans own and carry guns.

The suicide problem is enormously complicated without irresponsible access to guns. At a minimum, people who own guns should be required to keep them firmly under lock for the safety of society, let alone their own families.