Utilities Section
Newsletter
League of Nebraska Municipalities
August 2018

Lincoln residents ride on autonomous shuttle as part of study to implement the technology downtown

Editor's Note: This story originally appeared in the July 2018 *Nebraska Municipal Review.*

Lincoln **Mayor Chris Beutler** in July called on citizens to share their thoughts on an autonomous shuttle system for downtown Lincoln. A virtual ride and survey were available online.

More than 1,500 riders (including five League of Nebraska Municipalities staff members) recently participated in a test of a Navya shuttle at Nebraska Innovation Campus when it was in Lincoln for a few weeks. Riders gave the project team feedback on the shuttle, how it operates and which routes it could take.

Shuttle is electric

The driverless shuttle is electric and its main computer is in the trunk of the vehicle. It uses guidance and detection systems that combine various types of advanced technology, including data from LIDAR sensors, cameras and Global Positioning System (GPS). (LIDAR, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure variable distances to the earth.) All together, this technology monitors the position of nearby vehicles, detects lane markings and road edges, interprets traffic signals and controls steering, acceleration and braking.

'Historic first'

On a website about the shuttle project, Mayor Beutler wrote: "We are on the cusp of an historic first that will have a tremendous impact on Lincoln's future. The first on-demand autonomous shuttle can serve to showcase Lincoln as a national leader in technology innovation, drive new talent to our university and new investment to our community."

During the 2018 legislative session, lawmakers passed **LB 989**, sponsored by Lincoln **Sen. Anna Wishart**, which paves the way for use of autonomous vehicles in Nebraska. Gov. Pete Ricketts signed the bill April 23.

"Transportation and communications technology are evolving at a rapid rate and many cities, states and institutions are already pursuing driverless technology to stay competitive," Sen. Wishart said, adding that with the passage of LB 989, Nebraska has opened its doors to this innovative technology.

Lincoln Mayor Chris Beutler standing in front of driverless shuttle. Photo courtesy of the City of Lincoln.

City received Bloomberg grant

The City of Lincoln was able to lease the shuttle, which is manufactured by a French company, because of a $100,000 grant from Bloomberg Philanthropies as part of its Mayor's Challenge.

In February, Bloomberg named Lincoln one of 35 Champion Cities selected out of 320 applications to move to the next round of the competition.

Lincoln city staff have been working with Bloomberg to further develop the shuttle concept for its final application in August. In October, four cities will receive $1 million awards and one will

Continued on page 2

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UTILITIES SECTION

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Lincoln residents ride on autonomous shuttle

Continued from page 1
receive a grand prize of $5 million to implement its idea. To proceed to the next stage, city staff must obtain feedback from likely shuttle users and other members of the public to develop plans for a longer-term shuttle service.

Virtual service journey

For the project, the Public Policy Center at the University of Nebraska helped design a "virtual service journey" survey that allows the public to imagine riding the autonomous shuttle and provide feedback on their experience.

The virtual ride is a 360-degree video that allows participants to look around as they ride the shuttle. The survey includes questions about the reasons for riding the shuttle, preferences for service areas and stops and the acceptability of different fare structures. Those who complete the survey will find links to share their experiences on social media.

Four-six shuttles on fixed routes

If Lincoln's demo is successful and additional funding is received, four to six autonomous shuttles could travel along fixed routes in downtown Lincoln as part of a pilot program as early as 2019. Riders would summon the shuttles using smart phones or kiosks.

From 2007-2017, the City of Lincoln grew by 37,000 people and 7.9 square miles. The shuttle could be a way to help manage traffic and congestion because of that growth.

The city's partners in the project include HDR, Allo, Nelnet, the University of Nebraska-Lincoln, Nebraska Innovation Campus, Nebraska Innovation Studio, the Downtown Lincoln Association and The Mill.

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SAFETY/HEALTH CORNER

Handle car batteries safely

Reprinted from the November 2007 *Utilities Section Newsletter.*

As fall starts turning to winter, it is important to take proper precautions when handling your car battery. Here are some safety tips:

1) Never smoke or use anything that may cause a spark when you are working on a battery. Batteries contain two highly flammable and explosive gases; hydrogen and oxygen.

2) Regularly check the battery for damage. Look for cracks, corrosive material and loose wires.

3) Have a pair of jumper cables that are rust and corrosion free. Never use one that has exposed wires or cover exposed wires with electrical tape.

4) Never throw a battery in a garage dumpster. Take the battery to a service or recycle center so they can dispose of the battery to a proper recycling facility.

Batteries of today are by far safer than those of years ago. Batteries are not always kept under the vehicle hood as years ago. They may be in a compartment under the seat or in the trunk with positive/negative posts under the hood for jumping or charging purposes.

Backflow Workshops held

Backflow Workshops were held Aug. 22 in Wayne and Aug. 23 in Beatrice with 93 operators in attendance. Operators received five hours recertification for water operators grades 1-4 water and grade 6 and five hours toward wastewater licenses. Speakers included Rich Koenig and Rob Pierce with input from the local backflow operators. Patrick Miller of McClain Associates presented at the Beatrice workshop.

The next Backflow Workshop will be held in August 2019.

Nebraska Breaktime Trivia "Just For Fun"

Q-1. What water tower, constructed in 1975, was repainted gray with a draped U.S. flag?

Q-2. The "Free Public-School Act" was passed by the Nebraska Legislature in what year?

Q-3. What is the distance from Llewellyn, Pa. to Lewellen, Neb.?

Answers on page 13.

Nebraska utilities history

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, LNM Field Rep./ Training Coordinator

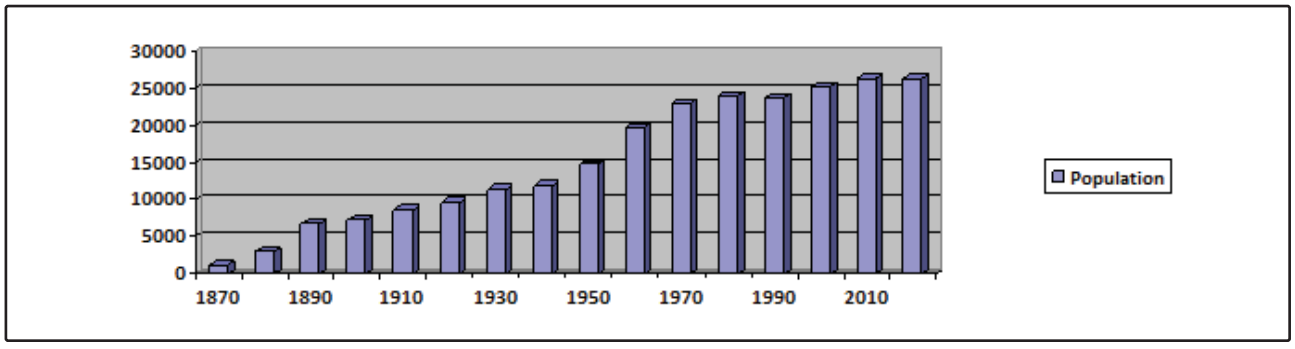
Fremont, located in Dodge County, was first surveyed in the summer of 1856 and by Aug. 23, one square mile was surveyed and platted by E. H. Barnard. The Pinney, Barnard and Town Company was organized, and the community was laid out using Military Road as the base line. By fall, the first house was built and on Jan. 6, 1857, the plat was filed by the Fremont Town Lot Company.

On May 3, 1857, possibly the first post office in the county was established with James G. Smith as postmaster. By Aug. 2, 1857, the Congregational Church was organized and a brickyard was established. In the summer of 1858, private school sessions were held by Miss Charity Colson. In July 1858, the Western Stage Company (Overland Stage) line started a tri-weekly stage line from Omaha to Fort Kearney to California via Fremont. On Nov. 2, 1858, Fremont's incorporation was approved by the Legislature. Lots were sold for $1.50-$5. By 1859, Fremont had 27 houses and on May 24, 1859, was incorporated as a village with a population over 200. At the June meeting, it was resolved to take a loan of $400 at 30 percent interest paid annually.

In February 1860, after Fontanelle was relocated to Washington County, a vote made Fremont the county seat over Robinsville and Blacksmiths Point. By 1860, the village grew rapidly and the first district school opened. In three years, the number of pupils went from 16 to 100. The telegraph lines were established and by 1861, the Congregational Church was built, a cemetery was operating and in May, the trustees engaged H. A. Pierce to break up the land where the city park is located, paying him $12 for the work. Bids also were received for fencing the park. In September 1865, the trustees appropriated $68.58 for the purchase of town lots to be held and used for a courthouse and county building. By July 24, 1866, the Union Pacific Railroad tracks reached Fremont and the first bank was built in 1867. In 1868, the Fremont House was built and in November 1868, the "Fremont Frontier Fire Company" was established. The *Fremont Tribune* newspaper was established and on Feb. 12, 1869, the BC & P Railroad made its junction with Union Pacific. The Elkhorn Valley Railroad laid 10 miles of track, which was completed Dec. 31, 1869. That year, the "Central School" was built.

By 1870, the population increased to 1,195 and in 1871, Fremont became a city of the second class. In 1874, Magenua & Mueller started a small brewery (operated about 13 years), the Fremont City Hotel was operating and on Dec. 15, the Opera House was completed. The population increased to 3,013 by 1880 and the Fremont Bottling Works and Fremont Foundry businesses were established. By 1884, the Fremont Butter & Egg Company was established and the telegraph office and Vienna Bakery were operat-

Continued on page 5



Nebraska utilities history

Continued from page 4

ing. In 1885, a new sidewalk was laid in front of the European Hotel block and the council voted on $25,000 bonds for water works. In August 1885, the city granted a franchise to a company known as Fremont Gas and Electric Light Company, which was under incorporation with a capital of $50,000. On Oct. 20, 1885, bids were let for the water system and received as follows: for the entire project ranged from $24,840-$27,840 from Fred Guy & Company of Omaha; bids from A. L. Strang of Omaha were $27,750-$29,750; bids from G. C. Morgan of Chicago were $27,000 and bids from Fairbanks Morse of St. Louis were $26,107 (except wells) and wells were only $1,750. Bids from John Moore & Co. of Omaha for wells only were $2,185 (wells only plan $1,680). For the pumps only, there was a bid of $3,930 from Dean Steam Pump Company of Hoyok, MA and a bid of $4,045 from Gordon Maxwell of Chicago. A contract for $27,000 to build the wells (pumping station at 8th & Park) with a water capacity of 100 gallons per minute (gpm), a 112-foot storage standpipe and the distribution lines had a June 1, 1886 deadline. The experimental “drive” well was tested and pipe made at the local foundry was said to be pumping 700,000 gallons in 24 hours at a depth of 23 feet. The privately owned Fremont Gas and Electric Light Company Power Plant began generating electricity and was used to pump water. In November, the Gas & Electric Light Company was resetting and connecting 20 street lamps at a monthly cost of $140. By December, the city paid the Gas & Electric Company $56.75, possibly for street lighting. In December, the JC Cleland Hose Company held a meeting and chemicals were purchased for fire apparatus from the Fremont Bottling Company for $9.35. In 1886, the Waterworks went into operation and the capacity of the original system was 100 gallons per minute or 150,000 gallons per day. The fire department relied on a few shallow street cisterns on different corners and water was pumped by the "Mud-Sucker," a force pump. This pump, a chemical engine and hook/ladder apparatus protected the city from fires. Fremont also had a fire tower located opposite the courthouse with a bell to notify people of a fire. In 1886, the volunteer fire department consisted of six companies with a hand pump used to pull water from several shallow cisterns around town, a chemical engine and a hook and ladder company. In the fall, arc electric lamps were installed along the streets and in November, the Fremont Foundry & Machine Company was repairing lamp posts. In 1888, an incandescent plant was installed, and the theater building was built. The city hall replaced the frame building with a new city/fire hall building in 1889 for $15,000. In 1889, the council voted on $35,000 for more bonds and these bonds of $60,000 provided the city with its first real water system. Source water from 50 drive wells at a depth of 50-80 feet. The original 112-foot standpipe was located on the south side of the city park. That year, a three-story brick building was built on

Fremont Power Plant. Photo from around 1910.

14 acres of land by the German Evangelical Lutheran Association and was dedicated for homeless orphan children.

By 1890, the population was 6,747, a second courthouse was built, a stock company was formed and a site was located to construct a brick brewery building for $125,000. The Fremont Gas and Electric Light Company was operating with 75 arc lights, 17 of which were used by the city for illuminating streets. The company also furnished the city with 40 gas street lights. In 1891, a bridge (south of Fremont) was built across the Platte River. A new fire alarm system was installed, Main Street was lit by electric lighting and four miles of a horse-car street railway track was throughout the city. In 1892, 385 different businesses were operating. The Fremont Gas and Electric Light Company furnished 500 incandescent lights to various individuals throughout the city. The arc system was divided into four circuits and the incandescent system into two circuits. The electric lighting plant was located near Fremont, Elkhorn & Missouri Valley Railway tracks and obtained coal from a side track. About 1894, a

Continued on page 6

Nebraska utilities history

Continued from page 5
municipal power plant was built, establishing the first municipal electric system. Possibly the first municipal electric plant (100 kW of generation) was located at Eighth and Park Streets (cost $18,000). The plant originally supplied only street lighting and operated from sundown to 11 p.m.

A paving project using bricks made in Beatrice was underway and the water system had 9½ miles of water mains. The city approved a $33,000 contract for construction of eight miles of collection lines and an outfall line and by 1893, the sewer system began operation. By 1898, the Fremont Sugar Beet factory was in operation.

In 1900, with a population of 7,241, Fremont had over 40 manufacturing companies in operation. In 1900, new sidewalk was installed and in January 1902, water meters were installed. Some of heaviest water users claimed their bills doubled with rates at $0.15 per 1,000 gallons. Two or three business threatened to erect windmills to furnish their water as the matter was referred to the water committee. In 1903, a Carnegie Library building costing about $15,000 was dedicated and the theater built in 1888 was purchased (1905), becoming the Love-Larson Opera House. The water system had 50 drive wells (50-80 ft deep), a 112-foot standpipe (capacity 28,000 gallons), a total combined capacity of 176,000 gallons per day (gpd), and 40 miles of mains. The streets were lit by incandescent street lighting and by 1906, three railroads were operating through town. In January 1907, roughly $70,000 was to be expended for improvements to both the water works and electric light plant. The downtown plant first offered 24-hour service in 1907, which continued in limited service until 1976 (units #1-5). In 1907-08, machinery foundations were constructed along with the erection of a chimney at the Fremont Water and Light Plant. In 1909, the Gas and Electric Plant was purchased by Henry L. Doherty and Company, which was later reorganized as the Fremont Gas, Electric Light & Power Company. The Nebraska Transportation Company began work on a new electric railway between Omaha and Fremont across the Elkhorn River.

By 1910, the population was 8,718 and an ordinance was signed allowing the Nebraska Transportation Company to construct a trolley line. By Sept. 5, the power plant (horizontal steam turbine, generator with a capacity of 500 kilowatts (kW), three-phase 60 cycle 2,300 volts), a condenser, switchboard, piping and other improvements were completed for $15,000. On Sept. 5, 1912, Application No. 894 allowed Fremont Canal and Power Company (later transferred to the Central service corp.), which is owned by the Kountze Brothers Bankers, a grant to remove 2,000 second feet from the Platte River south of Schuyler and returned south of Fremont with a completion date of Sept. 1, 1915. The Doherty Operating Company's Fremont plant (1915) provided electricity to Fremont and Cedar Bluffs. The plant had 2,055 horsepower (HP) boilers, a 2,000 HP steam engine and a generator rating of 975 kilovolt amps (kVA). The lighting rate was $0.05-$0.50 and the power rate was between $0.02-$0.05 per kilowatt hour (kWh). A 1915 Engineering report by Harold Almert of Chicago to the city on the Fremont municipal light and water covered 180 pages showing the plant with a value of $377,897 (to reproduce it, the cost would be $490,150). The last three years, the plant operated at a loss of $21,500 (amount includes taxes, interest and depreciation). Without these options, the plant made a fair profit on the original investment. Valuation of the plant was placed at $400,000 with gross income of $80,000 last year. The past three years, the plant operated at a profit of $29,536 but the electric department showed a deficit of $19,994. Fremont had about 2½ miles of paving in residential areas and the council ordered the hitching posts removed in 1915. Fires kept the Fremont Fire Department busy as the hotel block fire in 1914 damaged four businesses, at a cost of $12,000. In 1915, the courthouse (1890 building) was destroyed by fire and later replaced in 1918 with a four-story block building. The Dexter Hotel was gutted by fire in 1916. By 1917, the city had a 130-foot water tower with about four miles of water mains drawn from wells using a steam pump. Electricity in 1917-18 was provided by the Fremont Gas Electric Light & Power Company. The council voted in 1917 to hold a special meeting for bonds to install a sewage disposal plant. The Midland College that was founded in Atchison, Kansas

Continued on page 7

Nebraska utilities history

Continued from page 6
in 1883 was moved to Fremont in 1919.

The population in 1920 increased to 9,592 and the city had about $107,000 debt bonds for intersection paving work. The city had over 100 businesses, which included the Fremont Fence Company, a brick factory, a canning company, a planing mill, a Fremont Beverage Company, five cigar manufacturers, four ice cream manufacturers three hotels (Nine, The Pathfinder, The Terry), and three bakeries (Loyal Bakery Co., Vienna Bakery, F. J. Wislicen Bakery) just to name a few. The city had 40 miles of water mains in 1920 with the original standpipe and a newly constructed standpipe with a combined storage capacity of 176,000 gallons. The pumping capacity was 2 million gallons per day. The population was said to be 10,450 by 1921 and the municipal electric plant began building transmission lines to serve Arlington and Henry L. Doherty & Company and priced the gas works at $25,000. In 1922, the city voted down the building of a $25,000 swimming pool. Electric rates in 1925 ranged from $0.03-$0.10 per kW and water rates were between $0.075-$0.15 per 100 cubic feet (cuft). In 1928, Fremont was a member of the League of Nebraska Municipalities.

By 1930, the population was 11,407 and the Fremont Golf Club Golf Course (private) was opened. In 1933, a record was set for water consumption for a 30-day period in June using 79,263,900 gallons. A new record for daily output made on June 19 as 3,231,900 gallons passed through the meters. An estimated 20,000,000 gallons of water were used for gardens and the city watered free of charge 267 lots of unemployed persons. In 1934, the Public Works Administration (PWA) started the ornamental street lighting project for $26,282 with about 10 percent completed. In 1936, the steam power generation plant had a capacity of 5675 kW. The Fremont Municipal Auditorium was built in 1936 at a contracted price of $84,265 by the PWA. The population increased to 11,862 by 1940 and the electric plant changes included additions, along with the moving of transformers and office relocations.

In the 1940s, a PWA project consisted of new water main installation to the water distribution system. Population growth continued to 14,762 by 1950. The electric and gas systems were privately owned as were the solid waste collection services. By 1956, a publicly owned swimming pool (80x100ft) was built at an estimated cost of $125,000 and was financed by a tax levy. A municipal airport and an auditorium were in operation with the auditorium maintained by a tax levy and rental income.

Water Rates in **1956:** 2,000 cubic feet (cuft) at $0.11 per cuft, next 8,000 cuft at $0.07 per 1,000 cuft, next 90,000 cuft at $0.05 per 1,000 cuft, and excess at $0.04 per 1000 cuft;

Water Rates in **1962:** first 500 cuft @ 206/100 cuft min., next 7,500 cuft @ $0.08/, next 92,000 cuft @ $0.05, excess @ $0.04.

Water Rates in **2008:** *Residential* – first 9 ccf at $0.564 per ccf, all additional $0.655 per ccf; *Commercial* – first 100 ccf at $0.830 per ccf, next 900 ccf at $0.628 per ccf and all additional $0.568 per ccf. (charge based on meter size, & volume; one ccf is equivalent to 748 gallons).

The city electric steam plant had a capacity of 36,820 kWh, the electric system consisted of 186.5 miles of distribution lines, 7,129 electric meters and the cost of pumping water amounted to $0.01519 per kWh and the cost of street lighting was $0.01892 per kWh. The city sewer rates were $0.75 per month minimum. The water system consisted of 5,152 water meters in 1956, 5,403 by 1958 and 5,794 by 1962. The natural gas system in 1960 was privately owned by the Nebraska Natural Gas Company. The city sewer system in 1960 was maintained by a tax levy and a sewer charge. The city electric system consisted of 194 miles of distribution lines, 7,629 meters in service owned by the city (deposit of $2) and a capacity of 37,500 kWh at the steam plant. An electrical power loop around the city was planned at a cost of about $500,000 with the first phase of the 69,000-volt line started in 1964. In 1963, the public Whitetail Run Golf Course opened and in 1964, the semi-private Valley View Golf Course. In 1965, Unit #7 at the power plant began operation and by 1967, the $1.2 million wastewater treatment plant was in operation. The plant provides primary treatment (capacity to remove 30-40 percent of organic pollutants), sludge digestion and dewatering. From 1960-1970, the population increased from 19,698

Continued on page 8

Nebraska utilities history

Continued from page 7
to 22,962. By 1970, the water system had eight pumping stations throughout the city (combined capacity of 15,000 gallons per minute or 22 million gallons per day) and 97 miles of pipe. By 1971, the city-owned property had a net worth of nearly $20 million in its water, electric and sewer facilities.

The wastewater treatment facility (1971-72), added secondary treatment (capacity 10.5 million gpd), secondary lift stations, rough filters, intermediate clarifiers, aeration basins, final clarifiers, post chlorination facilities and gravity sludge thickeners along with some modifications to the lift station and the grease and grit removal basins. Construction started at the power plant in 1971 on Unit #8 and it was operating on line by 1976. The completion of the wastewater treatment plant was in 1975 at a cost of approximately $2,9 million. The treatment plant now provides 95 percent removal of pollutants. Roughing filters provide 50-70 percent removal of organics, and an industrial user charge was created due to the load. The facility has 200-foot aeration basins and a standby generator. By 1976, the collection system consisted of about 100 miles of sanitary sewer lines and a gas explosion occurred at the Pathfinder Hotel. The power plants in 1975 had a total capacity of 65,000 kW, but in 1976, the downtown power plant was closed. In 1978, a water project (cost of $1.8 million) added new water wells from a 600-acre well field located adjacent to the Platte River about three miles southeast of the city. A 30-inch transmission line had a total capacity of 20,000

Continued on page 9

Nebraska utilities history

Continued from page 8
gallons per minute or 30 million gallons per day from the wells to the city.

By 1980, the population was at 23,979, a fourth well was installed (1981) and the system had 120 miles of mains. In 1981, the Nebraska Natural Gas Company was sold to KN Energy Inc., and in March 1984, the Midlands Energy Company took over the Fremont Gas System. In November 1984, Freeport McMoran Inc., purchased the gas system for $2.9 million. In December 1985, the City of Fremont purchased the gas system from Freeport McMoran for $2.9 million. Gas rates were reduced by 10.75 percent and many former employees were retained. From 1986-1995, the city gas department identified 300 leaks in the system, replaced 54 miles of gas main over a nine-year period at a cost of $4.5 million. Old steel mains were replaced by plastic pipe and by 1988, about 65 percent was plastic pipe and 35 percent were steel. The city also provided natural gas service to Inglewood.

By 1990, the population was 23,680 and the city water system had a total of 124.37 miles of lines with 1,310 valves in service and 672 fire hydrants (601 pumper hydrants and 71 non-pumper hydrants). The electric department in 1991 had 257.08 miles of overhead and 39.08 miles of underground lines with 12,314 customers. In 1998, the water system had five wells, 155 miles of piping, 9,800 service connections, 840 hydrants, and a water treatment plant was built for $6 million. The water storage reservoir had a capacity of five million gallons of water with a backup power 890 HP, 12-cylinder diesel caterpillar engine. The wastewater treatment plant had an activated bio-filter system designed for 10.5 million gallons per day (mgd) with disinfection by chlorine gas and an anaerobic digester sludge treatment. In 1999, the facility updated storage and digesters.

The population by 2000 increased to 25,174 and the natural gas system operated by the city and supplied by Northern Natural Gas had 10,390 natural gas customers by 2001 with 172 miles of pipe and 20 employees. By 2002, a proposal was made for two new Cason type wells to be drilled. Water pumped in the winter amounted to 3.5-4 million gallons per day with a summer peak of 19 million gallons per day. Capacity was 22 million gallons per day with six wells and one on reserve. The proposed two wells would total eight wells with a concern of high manganese in the east end of the wellfield. A 2002 wastewater project included an egg-shaped digester and biosolids composting facility. By 2005, the treatment facility consisted of a flow through bar screen to air floatation tanks to primary clarifier to trickling filter, intermediate clarifiers to aeration basins to final clarifiers then through ultraviolet disinfection system before discharge to the Elkhorn River. Sludge was thickened by centrifuge to the egg-shaped digester, dewatered by centrifuge and composed with yard waste then land applied. The high peak design flow was 11.35 mgd, average design flow 5.12 mgd, with current average flow at 4.0 mgd.

Discussion in 2005 was that the City of Valley would begin sending wastewater to the Fremont Wastewater Treatment Plant. In 2005, the approximate water usage was 217 gallons per person per day. The Lon D. Wright Power Plant had three coal fire units producing 16.5, 22, and 91.5 megawatts respectively. Each year, the plant used approximately 370,000 tons of coal to produce about 620,128 megawatt hours of electricity. A gas peaking turbine generator was completed with commercial operation starting in the fall of 2003. The electric distribution maintains approximately 394 miles of cabling (261.69 miles of overhead and 132.06 miles of underground) and 14,210 electric meters. The department

Continued on page 10

Years of Service Awards

Remember to recognize your employees' anniversary milestones. The League provides certificates for 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60 and 65.

You can request them by contacting the League office by email info@lonm.org or fax 402-476-7052.

Nebraska utilities history

Continued from page 9
contains three divisions: engineering, line and service, totaling 24 employees. By 2008, there were 10,700 water meters in service and 10,756 wastewater customers. That year, the city introduced a new city logo, a drop with a lightning bolt replaced the bear logo.

In 2010, the population again increased to 26,397 and in October, the city received a $131,821 CDBG Grant for water system improvements. The project included 1,400 feet of new water mains, a storage reservoir and new wells with variable speed drives

In 2012, Fremont's water was selected as the best tasting water in North America at the American Water Works Association (AWWA) "Best of the Best Taste Competition" held in Dallas, Texas at the Annual Conference. A water sample also was submitted in the international water taste testing competition held in West Virginia. After the first round, Fremont was in 2nd place, but dropped to 14th place after round two.

By 2015, the city had 10,780 natural gas customers and private sanitation collection companies provided collection service. The Street Department provided maintenance and repair of street pavement, curbs, bridges, walkways, drainage culverts, traffic control signs and pavement markings. By 2016, the water plant had 14 active and two inactive wells. The city had 1,181 unmetered commercial and 9,103 metered residential customers. In 2017, plans were being made to hook up Valmont and a SID as Valley wasn't able to handle the added area. A water project was underway for more wells and a centralized well field with possible treatment.

Today, Fremont is a city of the first class with a population of 26,397 and a longtime member of the League of Nebraska Municipalities. Fremont also was a founding member of the Utilities Section back in 1931. The city maintains a city hall, an auditorium, a library, a municipal airport, over 10 parks, and utilities including electric, natural gas, water, wastewater and several miles of public city streets.

References: Nebraska Directory of Municipal Officials, 1956, 1958, 1960, 1962, 1964-75, 1977-87, 1990-2018; Nebraska Municipal Review Magazine, 1925, 1928, 1988, 1991; Public Power in Nebraska, 1962; Fremont Department of Utilities Brochure; Effluent Line Magazine, Fall 2005; Nebraska….Our towns, Central Northeast 1B, 1990; Nebraska Section-American Water Works Association, Centennial History Book, 1881-1981; Perkey's Nebraska Place Names, 1995; Nebraska Place Names, 1925, 1960; Fremont Internet Website, 2003, 2007-2018; Lincoln Journal-Star newspaper, 2004, 2006, 2016; Fremont Evening Tribune, 1906-36; Fremont Daily Tribune, 1940; Fremont Illustrated, Fremont, NE, 1905; Sargent Leader Newspaper, 1903, 1915; Bloomfield Journal newspaper, 1917; The Blair Democrat newspaper, 1915; Water Resources of Nebraska, December 1936; Public Power Magazine, Vol. 51, Number 1, January-February 1993; Maps Tell a Story, 1991; NEDED Website, 2005; Encyclopedia Britannica, 15th Edition, 1982; The Crete Democrat Newspaper, 1891-92; Nebraska Blue Book, 1918, 1928, 1946, 1978; Municipal Journal and Engineering, 1908-10; Nebraska State Gazetteer & Business Directory, 1890-91; Who's Who in Nebraska, 1940; Nebraska U. S. Census, 2010; Electrical World, January 19, 1907; Public Power the Early Years, 1996; Electric Power Development in the United States, Dept. of Agriculture, January 1916; Municipal Journal & Public Works, Political Science Vol. 23, July 3, 1907; Department of Labor and Department of Compensation, 1917-18; History of Dodge and Washington Counties, Nebraska and their people (Volume 1) William H. Buss, 1921; NPPD Website, 2011; History & Biography: History of the Elkhorn Valley, Nebraska, 1892; American Public Gas Association Directory, 2001 and Reflections, A Pictorial History of Fremont Nebraska 1870-1920, 1977.

Utilities Section members only

Do you have equipment to sell or a position to fill? Place your ad in the Classifieds section of the *Utilities Section Newsletter* for free. Contact Brenda Henning at the League office at 402-476-2829, fax to 402-476-7052 or email your ad to brendah@lonm.org.

Classifieds

Utilities Assistant. The Village of Elwood is accepting applications for a full-time Utilities Assistant. Duties include assisting with maintenance of streets, operation of sewer and water systems, park and swimming pool. Drug testing and a valid Nebraska driver's license are required. Salary is negotiable. A benefit package is offered with the position. Applications may be picked up at 304 Calvert Avenue, Elwood, NE 68937 or call 308-785-2480 for more information. E-mail requests for applications to villelwood@atcjet.net. Please include a resume with your application. Applications will be accepted until the position is filled. The Village of Elwood is an Equal Opportunity Employer.

Utility Worker I. The City of Aurora is accepting applications for the position of Utility Worker I. Applicant must be able to perform a variety of general maintenance work and operate a variety of equipment in the construction, operation, repair and maintenance of the City's water, sewer, waste water, parks, cemetery, sanitation and street facilities. Must have a valid Nebraska Driver's License, and be able to obtain a CDL. Salary is DOQ, with an excellent benefit package. Applications can be obtained at the Aurora City Offices, 905 13th Street, Aurora, NE 68818 or by calling (402) 694-6992 or via email at utlysupt@cityofaurora.org. Position will remain open until filled. The City of Aurora is an EOE.

Building Inspector/Health and Safety Inspector/Code Enforcement/Floodplain Manager. The City of Schuyler seeks applicants for the position of Building Inspector/Health and Safety Inspector/Code Enforcement/Floodplain Manager. The position is full-time and appointed by the Mayor with the consent of the City Council. The employee is under the supervision of the Administrator. Performs skilled inspections of building construction and repair work to assure compliance with building, plumbing, mechanical, housing and public safety, gas and zoning ordinance. Enforce the floodway/floodplain overlay district and city code. Minimum of four years experience in building inspection and/or construction experience, or equivalent combination of education, training, and experience. Salary is DOQ.

The annual salary range $43,284-$54,028. Full benefits package. First review will be Aug. 20, 2018. The position will remain open until filled. Candidates must mail a cover letter, resume, and three letters of references to City of Schuyler, 1103 B Street, Schuyler, NE 68661 or email to lljschuyler@gmail.com. Please contact Lora Johnson at 402-352-3101 for additional benefit information and a detailed job description. The City of Schuyler is an Equal Opportunity Employer.

Journey Line Worker. The City of Alliance is accepting applications for the position of full-time Electric Journey Line Worker with a starting pay range of $24.76-$31.95 per hour DOQ. This individual will perform skilled line work in the operation, construction, maintenance and repair of

Continued on page 12

Classifieds

Continued from page 11

overhead and underground electric urban and rural distribution and transmission systems. The City is offering a hiring bonus of $3,000 after the successful completion of probation and relocation reimbursement up to $2,000. The position includes an excellent benefit package including health, dental and vision insurance, retirement, vacation, flex time, sick leave and paid holidays. The City of Alliance Electric System includes 115 miles city and 200 miles of rural overhead and underground lines with a service area of over 150 square miles, which includes 10 miles of trans and sub-trans lines. The system operates with a transmission substation (115 KV) and three distribution substations (7.2/12.5 KV). The Department services approximately 5,000 customers, over 1,700 street lights, 220 irrigation wells and operates out the Public Works Facility, which was constructed in 2002. The Department maintains 10 vehicles, including a 60-foot and two 50-foot bucket trucks. A complete job description and application is available on the City of Alliance's Website at www.cityofalliance.net. Applications with resumes will be accepted until the position is filled.

Electrical Lineman. The Broken Bow Electric Department is accepting applications for a full-time Electrical Lineman. Applicants must be a U.S. Citizen, possess a valid Driver's License with the ability to attain CDL within 6 months of hire. Applicant must have at least 2 years prior experience as an Electrical Lineman. Benefits include vacation, sick time, holiday time and health insurance. Competitive wages with experience (Step 1 $21.41 to Step 9 $28.85). This position will remain open until filled. Applications are available online at www.cityofbrokenbow.org or may be picked up at the Utilities Office 314 South 10th Avenue, Broken Bow, NE 68822. Submit application and related information to: Broken Bow Municipal Utilities ATTN: Electrical Superintendent – Doug Staab, PO Box 567, Broken Bow, NE 68822 or via email at dstaab@cityofbrokenbow.org. Broken Bow is an EOE.

Utility Worker. The Village of Callaway is accepting applications for Utility Worker. This is a full-time position with benefits, including health insurance, dental/life, vacation and sick leave. Call 308-836-2262, visit the office at 157 E Kimball or villageofcallaway.com.

Water/Wastewater Utility II. The City of Schuyler, Department of Utilities is accepting applications for the position of Water/Wastewater Utility II. Nebraska State certification Grade IV Water and/or Sanitary Sewer Grade I is required. Pay rate $18.18-$22.83 per hour depending on experience and qualifications, with benefits. Drug test required. Applicants must be 18 years of age and hold a valid Nebraska driver's license. Candidates must mail a cover letter, resume and three references to the Schuyler Department of Utilities. Application and job description may be requested at the Schuyler Department of Utilities office, 204 East 10th Street, Schuyler, Nebraska, 68661 or via email supt@eaglecom.net. Applications accepted until position is filled. The City of Schuyler, Department of Utilities is an Equal Opportunity Employer.

Winter/Spring Water Workshops held in 2018

From January-July, the League of Nebraska Municipalities Utilities Section and the Nebraska Section of the American Water Works Association (NS-AWWA) sponsored 15 one-day workshops with 212 operators in attendance. The first two January workshops covered well rehabilitation, lining, pump operation and maintenance, siting a new well, source water protection and regulatory/industry updates. Operators attending these workshops received five hours toward grades 1-4 water operator licenses and two hours toward wastewater licenses.

The Kearney workshop, held Jan. 23, covered asset management presented by Michele Pugh from the Wichita State University Environmental Finance Center. Operators in attendance at the Kearney workshop received five hours toward grades 1-4 water operator licenses and five hours toward wastewater licenses.

The February-July workshop topics included water quality troubleshooting tips, distribution maintenance, safety programs, infrastructure sustainability and regulatory/industry updates. Operators attending these workshops received five hours toward grades 1-4 water operator licenses and five hours toward wastewater licenses.

License renewal will be December 2019. Be sure to have your required 10 hours to renew your license. If you still need hours, check the upcoming schedule of workshops in this *Newsletter* or the coalition training calendar.

Since 1992, almost 11,000 operators have attended water workshops sponsored by the Utilities Section of the League and the Nebraska Section of AWWA. The Utilities Section's oldest documented training workshop found was in 1931.

"Just For Fun" Answers

A-1. Wahoo. The 118-foot water tower was constructed in 1975 and through a public survey, the flag design was selected.
A-2. 1855.
A-3. 1,479 miles. *Reference: www.perdistance-cities.com.*

The 23rd Edition Standard Methods for the Examination of Water and Wastewater book is available. This edition has over 80 revised methods and five new methods, including a new drinking water method to test for pharmaceuticals and personal care products. More information can be found on the American Water Works Association website at: www.awwa.org.

Is your municipality or utility celebrating a historic milestone?

We encourage members to provide information on major milestones being celebrated, such as 75 years of operating the electric system.

About 1942, private electric systems were being phased out in Nebraska and several municipalities took over their systems in the 1940s.

Training calendar

Visit our website at www.lonm.org
for a complete list of workshops and conferences.

October
Oct. 24..... Water Operator Training Workshop .....Leage Office, Lincoln

January
Jan. 16-18..... Utilites/Public Works Section Annual Conference .....Embassy Suites, Lincoln
Jan. 22 ..... Water Operator Training Workshop .....Holiday Inn, Kearney
Jan. 23-24..... Snowball Conference .....Holiday Inn, Kearney

February
Feb. 12-13 .... Meter Conference.....Holiday Inn, Kearney
Feb. 25-26 .... Midwinter Conference .....Cornhusker Marriott Hotel, Lincoln