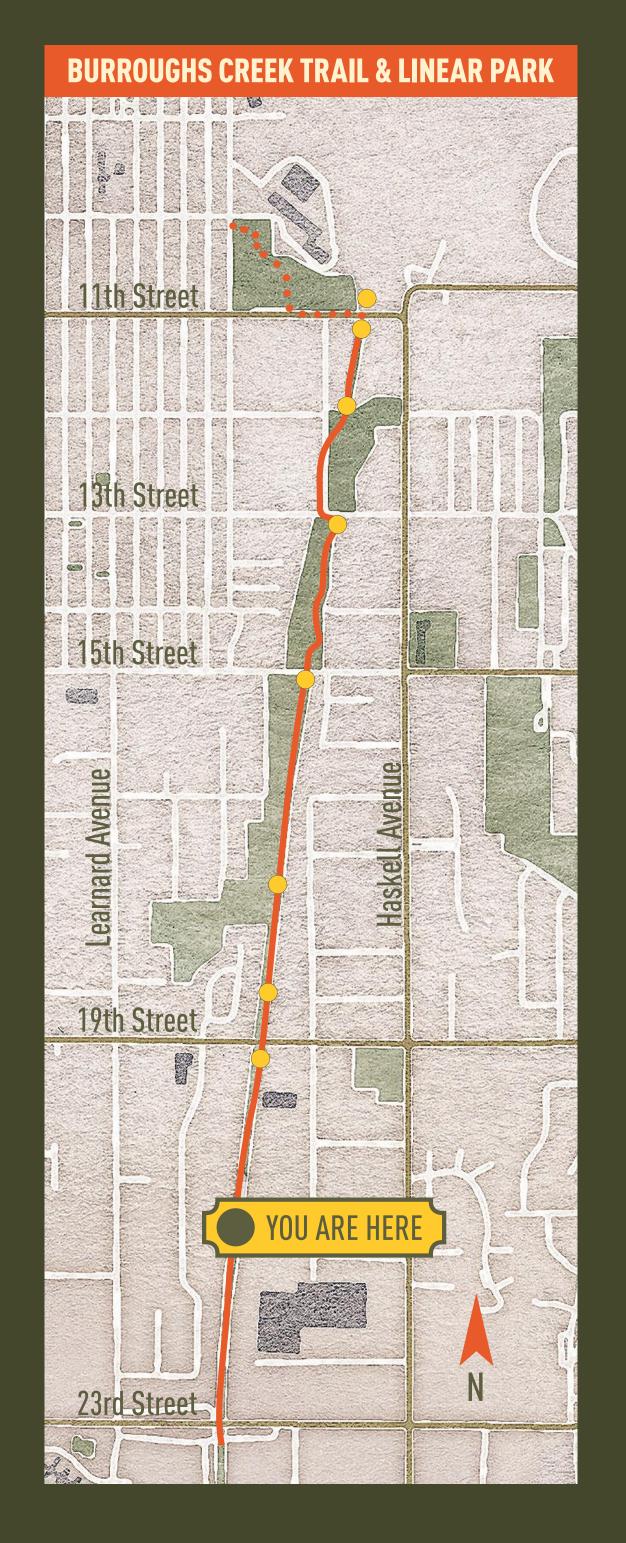
GOING WITH THE GRAINS



In operation since 1956 when the Burroughs Creek Trail was still a rail line, the ups and downs of the South Lawrence Co-op Elevator at 1941 Moodie Road offer insights into the changing agricultural economy of Douglas County

For most of its history, Douglas County was largely rural, with many small family farms. Much of the agricultural production entailed the cultivation of cereal grains – wheat for human consumption, corn for humans and animals, oats to fuel the all-important horses, and later soybeans (a legume treated as a grain) for food and industrial products.

Storage of the harvested crops was always an issue. At first, farmers kept grain in structures on their farms, but as time passed and production increased, buildings specifically designed to store grain from multiple farms sprang up. Taking the form of tall vertical bins or silos into which the crops were lifted, they became known as grain elevators. Elevators were initially constructed of wood, but as time went on, concrete became the building material of choice. Individual business entrepreneurs were the first to build grain elevators, but soon the increasingly popular memberowned agricultural cooperatives—known colloquially as "co-ops" — came to the fore. In Lawrence, the local Farmers Cooperative Association built the grain elevator on Moodie Road in 1956.

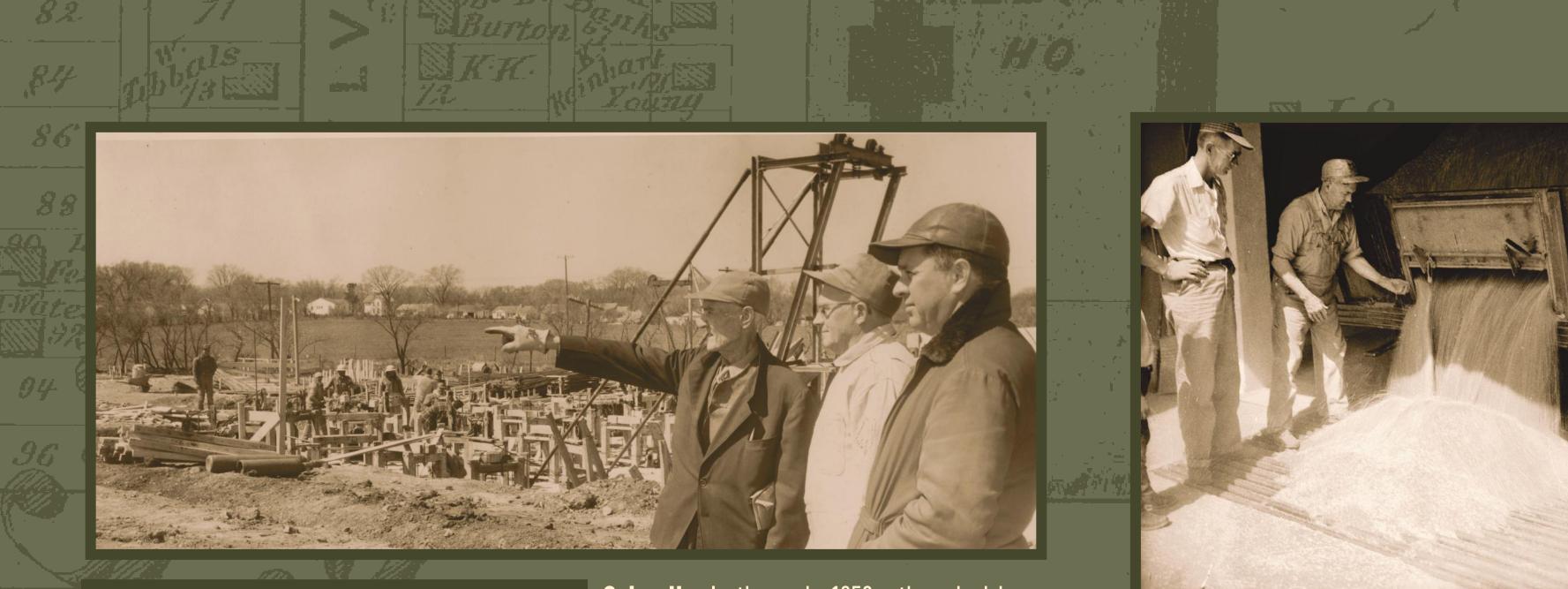
At one time, there were at least seven grain elevators in Douglas County. A sizable portion of the agriculture that remains is characterized by specialty and niche products.

In 1955, the year before the South Lawrence Co-op elevator went into operation, the combined total of wheat, corn, oats, milo, and soybeans planted in the county took up more than 100,000 acres. In 1985, grain crop land had fallen to around 80,000 acres. In 2015, it was less than 70,000 acres.

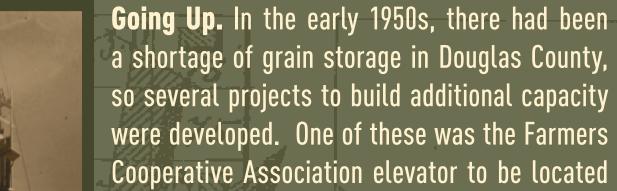
The number of Douglas County grain elevators has gone down accordingly. At one time, there were at least seven – one in Baldwin City, one in Eudora, three in Lawrence, one in Lecompton, and one at Midland Junction, all locally owned and operated. But the marked decrease in the production of grain in Douglas County led in turn to a reduced need for grain elevators.

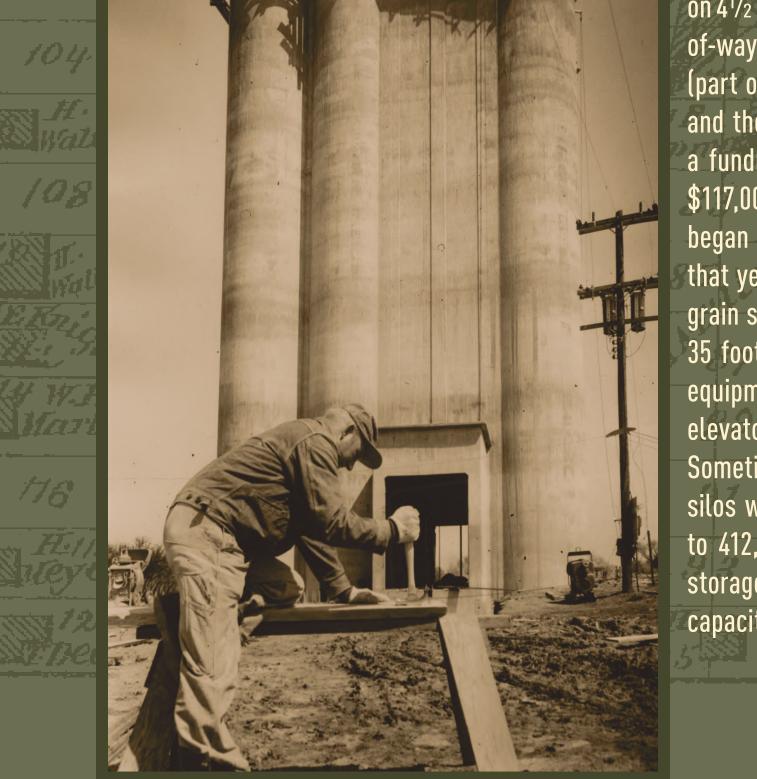
During the decades since, the steady growth of Baldwin City, Eudora, and especially Lawrence came at the expense of cultivated farm land. Thousands of acres were paved over or built upon. What was once an agricultural economy has changed to be one less and less oriented to farming.

nage Credit: Kenneth Spencer Research Library, University of Kansas Libraries



Grain Events. Grain is harvested by combines, and then off-loaded into trucks with beds enclosed by tall wooden front, side, and back-boards. When a fully loaded truck arrives at an elevator, it is parked on a large scale and weighed. A small sample of the grain is taken to test for moisture content. If the grain is too wet, the load cannot be accepted until it has dried out. If the grain passes the moisture test, the truck is driven into a small building with a floor that includes a large metal grid. The truck is positioned so that the rear of the truck is over the grid. The truck's back-board is opened. Its hydraulic lift raises the bed to dump the load. The grain flows out and falls through the grid, down a short chute where it is carried away underground by a conveyor belt or auger. When the process is completed, the truck is driven back onto the scale where it is weighed again. The difference between the full and empty truck is the weight of the grain that was unloaded. The truck is then driven back to the field to be refilled and the cycle repeated. All the grain of a particular type is mixed and stored together. Wheat is harvested in the late spring, oats in mid-summer, corn in early autumn, and soybeans in mid-autumn.





on 4¹/₂ acres, south of 19th Street along the rightof-way of the Santa Fe Railway line to Ottawa (part of which is now the Burroughs Creek Trail and the Haskell Rail-Trail). The Co-op launched a fundraising drive to pay for it. The cost was \$117,000 not including equipment. Construction began in April 1956 and was finished by July of that year. Comprised of six cylindrical concrete grain storage silos 113 feet tall and topped by a 35 foot tall "head house" containing operating equipment and machinery, the 148 foot tall elevator had a capacity of 150,000 bushels. Sometime later, an additional eight concrete silos were constructed that increased capacity to 412,000 bushels, and in 2015, a large steel storage bin was added, resulting in a total capacity of 621,000 bushels.

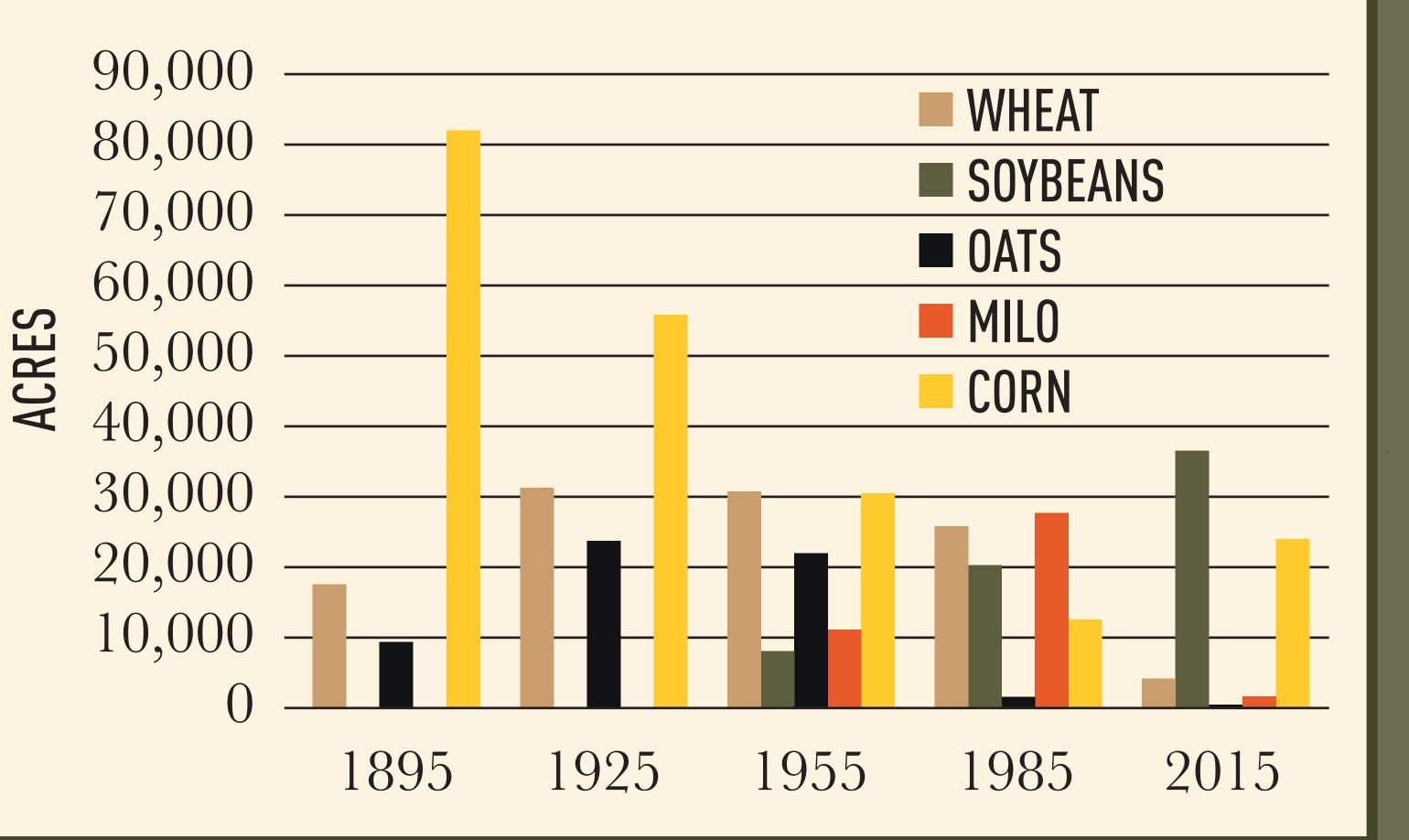
Image Credit: Kenneth Spencer Research Library, University of Kansas Libraries

Clean conditions prevent major explosion Blast rattles Co-op

A grain dust explosion at the Farmers Co-op grain elevator in Lawrence in provide the first-ever at the 38-year-old data dusiness. Agrain dust explosion at the Farmers Co-op Assn. south elevator blew side off metal doors and tore chunks of concrete out of interior walls but Nati injured only one worker Thursday afternoon.

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Three other employees of Cromwell Construction Inc. of Carltion, who were doing maintenance work atop the elevator when the explosion occurred, had climbed down the exterior elevator ladder and the fire department ladder under their own power shortly before. Hines, whose right arm was fractured in the explosion, was taken to Lawrence Memorial Hospital where he was treated and released, a hospital spokeswoman said. The 2:11 p.m. explosion occurred at the co-op elevator 20th and Moodle Road as the Cromwell employees used a cutting torch to cut out a bearing on a "leg," a piece of mas no ripple effect. In a conveyor being that carries grain up into a correct will be a conveyor being and the start carries grain up into a servical conveyor being and the start carries grain up into a served. A Major Dustup. Grain dust is flammable. The movement of grain through the various machines in an elevator can cause large amounts of grain dust to become airborne, and if the concentration of dust in the air rises to a critical level, it can be ignited by any spark or flame that comes in contact with it, which will cause an explosion. Grain dust explosions can be catastrophic, sometimes destroying the entire elevator and occasionally killing workers. On the afternoon of Thursday, February 10, 1994, several workers at the South Lawrence Coop Elevator were using a cutting torch on the roof of the head house. At 2:11 p.m., hot metal dropped down into the elevator and ignited grain dust. The subsequent explosion blew off metal doors, tore chunks of concrete from interior walls, and damaged machinery. Several men were nearly blown off the



J.W-

From Corn to Soybeans. Corn, which previously had been planted by various Indian tribes in Kansas, initially was the dominant grain crop in Douglas County. But by the 1950s, the acreage of corn diminished, and a new crop, soybeans, had appeared on the scene. Milo, or grain sorgum, which was used primarily for livestock feed, also became more popular. By the 1980s, corn acreage had fallen below that of wheat, and oat production had nearly dissappeared. Soybeans continuined a steady rise in acreage. By 2015, wheat production had fallen to its lowest level since early in the history of the county, and a side effect of this was a scarcity of straw bales. Soybeans had become the dominant crop, with its acreage surpassing the total amount of land devoted to wheat, corn, oats, and milo combined.





top of the elevator, but only one man was injured. He was lowered 130 feet to the ground by Lawrence firefighters, taken to the hospital, treated, and released. Although none of the stored grain was harmed, the cost of repairing the damage approached \$250,000.



[Image Credits: Douglas County Historical Society, Watkins Museum of History

A Word on Wheat. For thousands of years, wheat was harvested by hand. Stalks were cut with a sickle, spread on the ground, and beaten with hand-held flails to dislodge the wheat from the heads. The grain was tossed into the air, allowing the breeze to blow off the chaff and winnow out the grain. By the mid-19th century, mechanical reapers were becoming popular. A reaper was pulled behind horses and a rotating horizontal reel similar to a steam boat paddle wheel pushed the standing grain stalks into a horizontal cutting bar. The stalks were then conveyed to the end of the reaper where they would be tied together in stacks called wheat shocks. Shocks were thrown into one end of a threshing machine that beat the grain loose from the straw and blew off the chaff. The grain was directed to an exterior storage bin while the straw exited the machine at the far end to be used as fuel or bundled into straw bales. As farming became more mechanized, the combine harvester was invented to simultaneously perform the actions of the reaper and the thresher. First pulled by horses or tractors, they are now all self-propelled. As in the reaper, a rotating reel pushes the standing stalks into a cutter at the front of the combine. The stalks are carried into the combine where the grain is separated from the straw and the chaff, and conveyed into a hopper. The straw is ejected from the back, to be scattered behind the combine or baled into straw bales. When the grain hopper is full, the combine off-loads the grain into a wagon or a truck. The grain is taken either to storage bins on the farm or to a grain elevator.

AMPRIDE Cooperative to sell local headquarters

Bankruptcy also puts Ampride store on block

Mark Fagan claims from unsecured creditors, mfagan@ljworld.com Dumler said. Such creditors are owed \$8.5 million, according to court

tive Assn. is preparing to sell its Lawrence headquarters and other operations to help pay off its debts. The state's largest agricultural coop will "liquidate" its complex at 2121 Moodie Road for commercial development, said Don Dumler, FCA's president and chief executive offi-

filed documents with the court say ing its real property there is worth \$1.15 million. FCA values its rea so will be sold. The headquarters site, known a property in Gardner at \$350,000 he south elevator, covers more than The decision to sell the three si ight acres southwest of 19th Street comes as two regional cooperati and Haskell Avenue and no longer consider FCA's offer to sell them the akes sense as an agricultural oper- remainder of the co-op's assets tion, Dumler said. A dwindling Either Minnesota-based Cenex Har-number of trucks are willing to roll vest States or Ag Processing Inc., of nto Lawrence to dump grain, pick Omaha, Neb., could buy the remainfertilizer or collect propane. ing sites to keep them in operation, The value of the property is Dumler said. worth more than the operational selling those assets — more than a dozen elevators, feed stores and other sites, from Burlingame to Winon't be sold as an operational unit. chester — would fetch at least \$11.35 t will be disposed of, for whatever million, or enough to satisfy the estate is worth in the middle secured claims brought by CoBanl and UMB Bank, Dumler said. The property will be sold along The cooperative, which filed for apride convenience store Chapter II protection in September 1000 E. 23rd St. and another co-op, with 140 employees and more than op in Gardner, Dumler said. No 3,500 member-owners, was sent into "We're getting out of the retail line of credit in September. The co business, and getting back to the real op has been operating on a cash basis world of what we need to be doing." Dumler said.

The proceeds from all three prop-Business editor Mark Fagan can be reached at 8327999

[Image Credit: Kansas State Historical Society]

FRANK SALB, fills his gasoline cans at the Ampride station, 1000 E. 23rd St. in Lawrence. Money from Monday's purchase went to the Farmers Cooperative Assn., which wants to sell its store to cut the co-op's debt.

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Last Ones. By the 1990s, the Farmers Cooperative Association began to experience financial difficulties. The 1994 grain dust explosion added to an already challenging business situation. The co-op eventually declared bankruptcy. The Ottawa Cooperative Association of Ottawa, Kansas, purchased the elevator in 2001 and continued its operation. By 2016, only three grain elevators remained in business in Douglas County – two in Lawrence, and one at Midland Junction, all owned by Ottawa Co-op.

OTTAWA COOP

User-Owners. Cooperatives are member-owned organizations in a wide variety of business sectors that enable their owners to achieve economies of scale unobtainable on an individual basis. Farmers form cooperative associations to purchase and distribute seed and other agricultural supplies, and to handle harvested grain by building and operating grain storage elevators. Customers do not have to be a member to do business with the co-op, but only members share in the profits. At harvest time, farmers have three options. They can contract in advance to sell their grain directly to larger elevators run by national agro-businesses such as ADM or Cargill, they can sell to the co-op elevator that will then pool the grain together for sale to larger elevators, or for a fee, they can store their grain in the co-op elevator until they are ready to sell. As the number of co-ops has consolidated over time, a good portion of grain storage and distribution has been taken over by independently-owned grain elevators not associated with a co-op.

[Image Credit: Ottawa Cooperative Association]

The Burroughs Creek Trail Project is being developed by Sunflower Republic, LLC, under the auspices of the Lawrence Public Library and the Watkins Museum of History. The project is funded by generous support from Dolph and Pam Simons, The Kansas Health Foundation, and Freedom's Frontier National Heritage Area, with in-kind assistance from the Hall Center for the Humanities at the University of Kansas.