



Dallas Innovation Alliance helps solve city problems with **smart** solutions powered by AT&T IoT connectivity

- **Business needs** - The Dallas Innovation Alliance looked to build a smart cities framework to help solve the problems that matter most to the community. It needed a networking provider with the IoT expertise to launch its ambitious initiatives.
- **Networking solution** - AT&T connectivity and IoT proficiency support DIA's innovative goals for Dallas.
- **Business value** - The solutions supported small business revenues, helped reduce crime rates, conserved resources and improved the vitality, and appearance of green spaces.
- **Industry focus** - 501(c)(3) Public-private partnership
- **Size** - \$350,000 annual budget

About Dallas Innovation Alliance

The Dallas Innovation Alliance (DIA) is a 501(c)(3) public-private partnership dedicated to supporting the design and execution of Dallas's smart cities strategy. Its mission is to develop and test a scalable model that leverages the city's distinctive strength and leaves a legacy of innovation, sustainability, and collaboration for future generations. DIA hopes to make Dallas a driving force in shaping the future of cities and providing opportunities for prosperity for all citizens. The DIA defines a smart city as one that lives at the intersection of data, technology, and community to improve quality of life, resource efficiency, and inclusive economic development.

The situation

Connectivity is at the heart of smart solutions for the Dallas Innovation Alliance. The public-private partnership needed help in building and maintaining the infrastructure to support its smart solutions. The groundbreaking technology it planned to launch required 3 things: a top-tier provider with deep IoT expertise, a rapid solution development platform, and a ubiquitous, highly available network.

Solution

AT&T stepped up not only as a solutions provider but as a top-level, public-private partner to support Dallas Innovation Alliance's bold vision. Its highly secure global network, leading-edge platforms, and innovative ecosystem help DIA explore the promise of the Internet of Things as it develops solutions designed to benefit Dallas and its residents.

Investing in the future of Dallas

The Dallas Innovation Alliance is a coalition of government, business, civic, academia, and others motivated to improve the city's quality of life, facilitate economic opportunity, and create efficiencies. Dallas was one of the first cities in the U.S. to sign on to the Smart Cities Initiative announced by the White House in 2015. DIA was formed to continue Dallas's evolution as a forward-thinking smart global city.

The organization was founded by Jennifer Sanders, a community relations, public affairs and financial communications consultant, and Trey Bowles, an entrepreneur who launched several businesses

and created the Dallas Entrepreneurs Center. The friends shared an interest in technology, energy, and economic development and recognized the potential of deploying smart technology to create positive change in Dallas.

"There's been an obvious strain on the city's infrastructure with the population influx, aging buildings, and crumbling streets," Sanders said. The pair began exploring the economic development benefits that can result when cities invest in innovation and resiliency.

A partnership for progress

Alongside leadership from the city of Dallas, Sanders and Bowles decided the best way to move forward was by forming a free-standing 501(c)(3) that could bring all interested parties to the table. Sanders is the organization's Executive Director and Bowles is cofounder and Chairman of the Board. "Certainly, one benefit to our partners was that no one participating in DIA would have any preclusions from procurements," Sanders said. "So information and expertise could be shared freely, and we could develop the best solutions to the challenges facing Dallas."

With nearly three dozen partners contributing their expertise and, in some cases, financial resources, the organization's \$350,000 annual budget does not include any taxpayer dollars. As a result, DIA was able to approach the City of Dallas to offer a partnership without asking for funding. "Mayor Mike Rawlings was really supportive of us and put us immediately in touch with the city manager and chief information officer," she said.



City officials signed a formal contract with DIA that enables the organization to operate as the city in the right of way for the public good. All the work that DIA performs will become property of the city.

Positioning Dallas as a smart cities leader

DIA defines a smart city as one at the intersection of community, data, and technology that's working to improve quality of life, facilitate economic growth and access to opportunity, and increase efficiencies. The organization set out to investigate the use of smart city technology in Dallas.

As it chose its first projects, DIA considered the ideas of government officials and Dallas residents. "One of Mayor Rawlings's top priorities has always been cultivating Dallas as a world-class city and differentiating itself as a leader among large cities," Sanders said.

With the blessing and support of the city, DIA launched the Smart Cities Living Lab, a four-block area in the city's West End Historic District. "The West End is a microcosm of the city in terms of having the building mix, function, access to the mass transportation, major museums, and great nostalgia involved with the West End being the original Dallas," she said.

A future of possibilities in a historic neighborhood

"A historic district creates a special energy and magic to having something very futuristic and forward-



looking juxtaposed with these beautiful, historic warehouse buildings," Sanders said. "So we picked a high-density location that we believe could have a really strong neighborhood revitalization component in addition to all of the other efficiencies there."

The goal of the Living Lab is to provide an environment that enables Dallas to test technologies and strategies. Surveys had indicated residents' and officials' top priorities included traffic mitigation, public safety, and economic development. To address these concerns, Phase 1 of the Living Lab set out to investigate connected solutions such as LED lighting, parking, irrigation, and pedestrian traffic sensing.

Dallas Innovation Alliance needed help in building and maintaining the infrastructure to support the smart solutions it planned to deploy. This required a top-tier provider with deep expertise, a scalable, rapid solution development platform, and a highly available network that could support the city's Internet of Things-enabled projects.

AT&T expertise jump-starts innovation

AT&T, a pioneer in smart technology, was an early supporter of the Dallas Innovation Alliance, signing on as a top-level organizational partner. “As one of our founding partners, AT&T brought its expertise and resources to bear,” Sanders said. DIA called on the highly secure global network, cutting-edge platforms and advanced ecosystem of AT&T to help it explore the promise of the IoT as it developed solutions designed to benefit Dallas.

“AT&T provides all the connectivity associated with the Living Lab,” she said. “It created the basic infrastructure for the Living Lab to operate.” Many of the initial projects are driven by AT&T strategic alliance relationships from its smart city ecosystem. “This includes everything from the GE Intelligent Control Nodes for smart lighting, the AT&T Smart Cities Digital Infrastructure solution with Current, powered by GE CityIQ™ intelligent nodes, HydroPoint® smart irrigation, and Ericsson’s environmental sensor,” she said. “And AT&T provided a great deal of the support work.”

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Mike Rawlings

Former Mayor, City of Dallas

This expertise helped DIA launch its programs in months rather than years. “We’re most proud of the speed with which we were able to execute the Living Lab. We went from ideation and identification of each case to installation in about 10 months,” she said. Other cities that took from 3-5 years to deploy their projects called to ask how Dallas was able to launch so quickly. “Our model clearly has benefits. Direct alignment plus no procurement is really kind of the magic recipe operationally,” she said.

DIA introduced nine Phase 1 projects in the compressed environment of the city’s West End to study the individual use cases and how the organization could leverage the data it collected to enhance the initiatives’ cumulative benefits. “We’re not just looking at energy data from the lights,” she said. “We’re looking at how energy data correlates with public safety, foot traffic, eyes on the street, and economic development as a result of the increased pedestrian traffic and the perception of safety.”

Better revenues, less crime, resource conservation

One project involved lighting pathways to attract more pedestrian traffic in the hope of increasing neighborhood revitalization and economic development. DIA data showed a double-digit increase in foot traffic in the West End; the data helped the organization provide small business owners with better insight into when the pedestrian traffic spikes occurred.

“Some of them were not what we expected and as a result of having that insight, some of the restaurants changed their marketing and offered appetizer

specials to capture more of that traffic,” Sanders said. “The area saw small business revenue go up double digits year over year as well, and crime went down 6 percent.”

DIA also tested smart irrigation techniques at Dealey Plaza, in the grassy knoll area near JFK Memorial Plaza. Nearly 750,000 people visit the area annually, so the grass is often trampled and sun damaged. DIA installed a HydroPoint smart irrigation system that uses AT&T IoT technology to determine precise watering needs and detect leaks. The project saved water and improved the landscaping by delivering the right amount of water just when it was needed.

Other smart projects looked at sensor-enabled parking, public Wi-Fi, and an interactive digital kiosk. “After a year-long pilot, we found that several of the initiatives have really high ROI,” she said. “Some we extrapolated as being really relevant across the entire city; others are more applicable in dense urban environments.”

Hometown investments benefit cities everywhere

Sanders said DIA is fortunate that AT&T became involved so early in its Living Lab project. “Dallas is the hometown of AT&T and being able to follow your core tenets of investing in the community and serving the community was a natural fit,” she said. “We’re so grateful for the leadership role that AT&T has taken in general in the industry and for cities, but specifically for DIA in Dallas,” she said.

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Jennifer Sanders

President and Co-Founder, Dallas Innovation Alliance

Former Dallas Mayor Mike Rawlings is proud of the impact that DIA’s projects have already made and anticipates continuing benefits from the groundbreaking solutions. “The work of AT&T and the Dallas Innovation Alliance in building the Living Lab has provided a great platform to test and share results of projects that could broadly impact Dallas for the benefit of our citizens,” he said. “We look forward to continued progress in creating a truly smart city for all of Dallas.”

DIA is working now to introduce Phase 2 projects in southern Dallas, and with the Innov8te Smart Cities Incubator that supports startups working on urban transformation. “AT&T is already a core partner of the incubator,” she said. The goal is getting startups involved with the city and providing more avenues for emerging companies to commercialize and build their customer portfolio as they grow.

“None of this would have been possible without AT&T,” Sanders said. “I know a great deal of internal resources as well as the capacity for funding that allows us to operate is something that can’t be overstated.”