

NTTA

2004 - 2016

NTTA

Chapter One - 2004

Better Roads, Safer Operations

By the end of their first 50 years of operation, the North Texas Tollway Authority (NTTA) had become a driving force in the burgeoning growth and prosperity of North Central Texas. Toll roads were continuing to expand, connecting more and more communities, reducing drive times, facilitating growth and spurring development. New infrastructure projects funded by toll revenues were being announced all across the region. Yet at town hall meetings and other public forums, there were still people who did not understand the importance and benefits of toll roads. They felt that tax revenue should pay for public roads; they disliked paying tolls; and they were impatient for existing toll roads to be handed over to the state.

NTTA Board Chairman, Ken Barr, described what he encountered this way: “Some long-time residents, who remembered the changeover from the Dallas-Fort Worth Turnpike to the non-tolled IH 30, asked about the DNT (Dallas North Tollway), ‘Isn’t that road paid for yet?’”

For more than 20 years, public roadways had been financed by the Texas state fuel tax, a fixed percentage of gasoline sales. But the fuel tax could not keep up with the pace of development the area’s growth rate demanded. The continued safety, prosperity and quality of life for North Texans required acceptance of a new approach to roadway financing, an approach beyond fuel-tax-only financing.

Former NTTA Board Chairman Paul Wageman said at the time, “What changed most fundamentally was TxDOT (Texas Department of Transportation) basically saying they were out of money to build roads. All they could afford to do was maintain roads. But we were adding a million people to the region every ten years and there was growing demand on TxDOT to build more roads.”

Tarrant County Judge Glen Whitley gave voice to that demand by saying, “We are still three to four billion dollars a year from being able to meet our transportation needs just to keep up with growth. There are a number of projects in our region that could have been built if leveraged with tolls.”

State Senator and Senate Transportation Chairman Robert Nichols added, “If the legislature could have figured out funding, there would have been no toll roads at all. The cost of preserving an aging system goes up every year—maintaining infrastructure can end up costing three to four times as much as the original construction... The Texas fuel tax hasn’t changed in 24 years. During that time, commodity prices have grown 160%.”

Reflecting on the resistance to toll roads that persisted despite the increasing demand, NTTA Board Chairman Ken Barr viewed the issue philosophically: “Tolls are a little bit like taxes. People are willing to pay their taxes, but they reserve the right to complain about paying taxes.”

In the end, however, the pressure of created by the region’s growth rate, the specter of overcrowded roadways and the unavailability of adequate state funding proved to be more persuasive than the onus of paying tolls. As the use of tolling to fund roadways expanded, a vast majority of the general public came to favor the practice. A 2010 survey by civil engineering consulting firm HNTB Corporation showed that on a project-by-project basis, 84% of Americans preferred tolling over increased transportation taxes.

Tolling not only provided better financing for roadways, it also ensured better quality roads by including ongoing maintenance and repair costs in the initial bond funding, ensuring that tollway road condition and safety would not be subject to government budget shortfalls or changes in priorities.

A prime example of the benefits being brought to North Texas by NTTA is the Dallas North Tollway. In April of 2004, the extension of the Dallas North Tollway from Legacy Drive in Plano to Gaylord Parkway in Frisco was completed, providing new access for developments such as Stonebriar Centre, sports and entertainment facilities, restaurants and retail sites.

This included the three-level DNT/SH 121 interchange. With the assistance of the Texas Department of Transportation (TxDOT), this interchange was completed four months ahead of schedule, enabling IKEA to open a massive retail facility there the following year. As the DNT extended northward, it continued to attract businesses like IKEA and Frisco grew from a small farming community to a thriving new city almost overnight.

In evaluating the role of the DNT in the extraordinary growth of Frisco, Mayor Maher Maso observed, “The only reason we’ve grown quickly is

ability for people to get here and also to get where they need to go outside of Frisco.”

By the end of the year, construction contracts had been awarded for the extension of the DNT from Gaylord to Highway 380. At 9.7 miles, this segment was to be the longest single extension in the road’s history, increasing the length of the DNT by fifty percent. As a result, Frisco grew so quickly that previous projections of area growth were called into question.

To address that question, the City of Frisco commissioned new research into the area’s demographic trends and presented their findings to NTTA Board of Directors. “Fortunately,” Mayor Maso recalls, “NTTA Board was very willing to listen and look at our numbers, then they agreed with us to expedite the DNT through Frisco to (U.S. Highway) 380. That was one of the milestones in our history. Without a doubt, without the DNT coming through Frisco, the growth would not have been what it is.”

Frisco, of course, was not the only city in North Texas experiencing rapid growth in 2004. Across the entire region, accelerating growth rates were accelerating the need for fast, efficient roadways -- and NTTA was up to the challenge, pursuing multiple projects simultaneously.

By the end the year, Segment VI of the President George Bush Turnpike (PGBT), connecting IH 35E to IH 635, was 70% complete. At the other end of the PGBT, NTTA gained environmental clearance from the Federal Highway Administration to proceed with the design and construction of a section of roadway passing through Dallas, Garland, Rowlett, and Sachse that would span Lake Ray Hubbard.

In Ft. Worth, NTTA’s first toll project in Tarrant County, the Southwest Parkway, was granted the environmental clearance to connect the city’s central business district with IH 30, the first leg of a tollway designed to reduce drive time from Ft. Worth to Cleburne substantially. This was one of two toll projects authorized by the Regional Transportation Council that year. The other was the Lewisville Lake Toll Bridge, which entered its design stage. To be built in partnership with the cities of Frisco, Little Elm and Lake Dallas, Denton County and TxDOT, the bridge would connect the DNT to IH 35E and dramatically cut the drive time from Denton to Frisco.

To save motorists even more time, Express TollTag Lanes were installed at every toll plaza, enabling drivers with TollTags to pay their tolls without

stopping. By the end of the year, TollTags were used for 85% of all transactions during peak hours.

Cutting drive time, however, was not NTTA's only priority. That same year steps to further improve the safety of roadways that were already the safest in the nation. One of NATTA's most innovative initiatives was the implementation of their Intelligent Transportation System, which brought the benefits of advanced technology to NTTA's internal operations, motorist communications and road paving process. At the heart of the system was a fully integrated communications and roadway management center designed to handle traffic monitoring, safety operations and emergency dispatch functions.

NTTA's Director of System and Incident Management, Eric Hempill, remembers, "We were receiving more than 4,000 calls each week from motorists reporting accidents, objects or debris, or other incidents on our roads. We started developing technology and systems that would allow us to detect and identify these incidents almost instantly, and immediately dispatch assistance to the scene."

The initial installation included 20 closed-circuit video cameras positioned to monitor key stretches of roadways around the clock. In a first for the surface transportation industry, NTTA adapted software developed to detect abandoned luggage at airports to detect stalled vehicles, accidents or debris and send alerts to the command center. By the end of 2005, the system included more than 200 cameras, enabling the command center to monitor virtually every mile of NTTA roadways.

Hempill explained, "When we get an alert, we pull up that camera. We can see, for example, that's a couch, and we need to send somebody out there to pick it up. If a car stalls and blocks a lane, there's an alert. Or it could be that they just pulled over to check a map, and they drive off, and we'll say, 'Okay, they're fine.' Many times, we've identified accidents before anyone calls 911. In some cases the drivers may be dazed or confused and not able to call for help right away. Our content analysis cameras have identified the accident and started dispatching resources. By the time anyone called 911, we already had emergency responders on the way."

To further enhance the safety of NTTA roadways, construction crews began placing sensors that detected freezing temperatures directly into the pavement. With information from the sensors, dynamic message signs

could then advised motorists of hazardous weather conditions, lane closures, travel times and other relevant information.

“Our goal is to prevent incidents from happening. And when something does happen, we want to recognize it and clear it quickly,” added Hemphill.

To further advance safety, NATTA installed pre-cast concrete safety barriers in the median along the entire 25-mile length of the PGBT. Even though the wide, divided turnpike had always met or exceeded every Federal safety requirement, NTTA wanted to provide their customers with an additional level of protection from potential crossover accidents.

To increase driver awareness and improve the safety of tollbooth personnel, NTTA launched the “Wave at Wally” campaign. Featuring a costumed character dressed in a bright orange shirt with large orange hands waving from billboards and NTTA vehicles, Wally personified tollbooth personnel and generated good will toward them. Wally also made appearances at the State Fair of Texas and other community events.

“We focus so much on safety because it’s the right thing to do. There’s also a practical side—by preventing incidents and quickly clearing any problems, we’re able to keep more lanes open and keep traffic flowing. Our focus is on getting people efficiently to where they need to go, and, most importantly, everybody getting home safely at the end of their day,” Hemphill concluded.

NTTA roadways were not only made better and safer during 2004, they were also made greener and more beautiful. One of the most important projects was the landscaping of more than 125 acres along the PGBT with more than 2,500 trees, 308,000 shrubs, vines and grasses in order to prevent embankment soil erosion and provide a more pleasant driving experience. To minimize the need for water, native and drought-tolerant species were planted and an irrigation system with sensors that monitored moisture and regulated the watering was installed. The results were beautiful scenery, cooler temperatures, reduced noise and a far more rewarding driving experience.

Better roads, safer travel and more pleasant driving: these features manifested the values and benefits NTTA had become known for delivering. By the beginning of 2005, NATTA was perfectly poised for unprecedented progress.

NTTA

Chapter Two – 2005

Impressive Progress, Exceptional Performance

Almost as soon as it was constructed, the interchange at IH-35E and IH-635 became notorious for traffic congestion. To alleviate that congestion, NTTA designed a tollway, officially designated as Segment IV of the President George Bush Turnpike and more commonly known as the Super Connector, that would directly connect IH-35E at Trinity Mills in Carrollton with IH-635 near Valley View Lane in Irving. As an added value, the roadway would also provide a faster, more direct route to the north entrance of the DFW Airport.

Building the Super Connector would require the construction of a roadway through the ecologically sensitive wetlands of the Trinity River floodplain, a route that presented significant environmental challenges. To meet those challenges, NTTA assembled a team of government and private sector specialists that included Carter & Burgess engineering and environmental consultants of Fort Worth, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers and the Dallas Zoo.

The plan developed by this diverse team included the construction of more than 40 acres of wetlands and open water, the planting of more than 30,000 new trees and shrubs along the riverbanks, and the placement of approximately 1.5 million square yards of turf to aid in storm-water runoff and protect water quality. When these improvements were completed, the Super Connector's environmental impact actually improved the integrity of the Trinity River ecosystem, by providing valuable wildlife habitats and downstream flood protection.

In addition to meeting environmental challenges, the Super Connector had to cross three municipal landfills. To secure the right of ways, NTTA successfully secured the cooperation of the cities of Carrollton, Farmers Branch and Irving, as well as Dallas County, the Texas Department of Transportation (TxDOT) and the Valwood Improvement Authority. NTTA also negotiated incentives with contractors to expedite construction.

As a result, the Super Connector was opened for traffic in September of 2005, five months ahead of schedule at a cost of \$338 million, which was significantly less than had been estimated. Beating both the construction

schedule and the projected budget represented a significant achievement that demonstrated NTTA's ability to meet the region's transportation needs with exceptional performance. On its first full day of operation, 50,000 vehicles traveled the Super Connector, revealing just how much demand had built up for this eagerly anticipated roadway.

2005 also saw continued progress on the Eastern Extension of the PGBT, including the right-of-way acquisition and design for a 10.5 mile section extending from SH 78 to IH-30 through the cities of Dallas, Garland, Rowlett, and Sachse. Looking at the planned route for this section, Indianapolis-based Simon Property Group selected a 94-acre site near state highways 78 and 190 in Garland for Firewheel Town Center, a one million square-foot retail development.

As the first major retail project to be constructed in the area, Firewheel was expected to draw shoppers from Garland, Rowlett, Rockwall, Sachse, and Wylie. Grand Opening ceremonies were scheduled for October 7. Working closely with the City of Garland and the private sector, NTTA met that schedule, completing construction of the frontage roads between SH 78 and Firewheel Parkway in time to provide thousands of shoppers with easy access.

Progress was also made on the extension and renovation of the Dallas North Tollway. In March, construction of the DNT's Phase 3 Extension was launched with a groundbreaking ceremony at Frisco Square, the Main Street location of the new Frisco city hall. The \$264 million roadway would extend the length of the DNT to 31 miles, from just north of downtown Dallas to US 380 in Collin County.

At the downtown end of the DNT, NTTA was working to completely rebuild and renovate the tollway's oldest section. The design included the reconstruction of the Main Lane Toll Plaza and the construction of a new interchange at Oak Lawn Avenue near the south end of the DNT, approved by the Federal Highway Administration.

On the west side of the Metroplex, progress was made on the development of the Southwest Parkway Corridor Master Plan. A connecting roadway between Ft. Worth and southwestern Tarrant County had been proposed for decades but no proactive steps had been taken. But now, with the leadership of NTTA, an Environmental Impact Statement, five final design contracts and a general engineering management contract were completed and executed.

NTTA also made progress in customer service in 2005, by initiating a new, more holistic approach. As NTTA Director of Customer Service, John Bannerman, explained, “We adopted the universal agent approach, where every customer service representative was cross-trained and equipped to handle almost any customer request. We didn’t want customers to endure having their calls transferred from department to department, or not getting immediate answers to their questions or requests. We increased our first-call resolution rate to 92%. That was industry-leading performance according to the Benchmark Portal Certification process at Purdue University.”

Implementing this approach increased the number of NTTA Customer Service Center agents from an initial number of 75 to more than 300. It also created a customer experience management program that would assure customers’ needs were being met across the board, including personal phone contacts, an automated telephone system, e-mail, the Customer Service Center and tollbooth contacts.

To enhance customer service out on the roads, NTTA joined with TxDOT and Dallas County to provide a Courtesy Patrol Service that put vehicles on the tollways during peak hours to provide roadside assistance. Soon after it was put into place, the service was providing roadside assistance to an average of 190 motorists per week.

In November of 2005, NTTA issued its one-millionth TollTag. When they were introduced in 1989, NTTA TollTags represented the first application of electronic toll collection in the country. By 2005, more than 80% of NTTA toll transactions were electronic.

The system was so successful that NTTA and the City of Dallas extended the benefits of TollTags to parking facilities at Love Field. More than 232,000 transactions were posted the first year. The Airport also used TollTags to collect parking fees at the new international terminal, increasing total TollTag transactions at the airport to nearly 5.5 million.

NATTA went on to apply the TollTag system to other businesses and entities. Through a reciprocal agreement with Harris County Toll Road Authority, Houston motorists posted more than 1.5 million transactions in Houston and almost 700,000 on the Dallas North Tollway. Today, similar systems are in use by 37 tolling agencies in 16 states.

All these initiatives taken together earned NTTA high marks for service in focus groups and surveys. As John Bannerman described their success, “With the TollTag system architecture and infrastructure working seamlessly, operations were easily scalable. We looked for ways we could extend the convenience of the TollTag beyond NTTA roadways and add value for our customers.”

As the population of North Texas continued to grow and the number of drivers on NTTA roads increased, NTTA leadership wanted to develop the ability to simultaneously finance multiple projects throughout the region, assure investors of predictable revenue streams and provide equitable toll rates for all customers. To achieve these goals, they developed a Regional Mobility Partnership Plan (RMPP) that set and maintained a uniform toll rate across the entire NTTA system. The RMPP also recommended regular, incremental toll increases to fund operations and expand future financing.

Former NTTA Board Chairman Paul Wageman explained, “In the past, as Dallas-Fort Worth continued to grow bigger, as material and road construction costs increased, we counted on paying for it by having so many more people riding our road, as opposed to setting the toll at a rate that would really prudently pay for what we were buying.”

A structured, predictable toll rate plan was an innovation that benefited both motorists and the financial community. “I believe we were the first or one of the first agencies in the country that created a ‘triggerless’ toll rate policy,” Wageman continued. “It gave tremendous encouragement to the bond rating agencies that NTTA would have the wherewithal to support our debt.”

Another provision of the RMPP would allow local communities to add project features such as design elements, landscaping, and other amenities that exceeded NTTA’s established project standards by contributing to the increased development and construction cost or allowing NTTA to implement a higher toll rate for that part of a project.

NTTA made progress in many areas of operation in 2005. They worked with TxDOT, Dallas Area Rapid Transit and the North Central Texas Council of Governments to introduce managed lanes on IH-30. Their 2005 Comprehensive Annual Financial Report earned the Governmental Financial Officers Association’s highest rating. And they reached out to disadvantaged business enterprises to advance diversity and inclusion.

From new roadway construction to TollTag innovations and customer service, 2005 was a year of impressive progress and performance.

NTTA

Chapter Three – 2006

Economic Growth and Technological Innovation

In 2006, The University of North Texas Center for Economic Development and Research undertook a study to determine the economic impact of tollway construction in the North Texas region. The study found that building toll roads had enriched the area's economy beyond almost anyone's expectations, stating, "The (Dallas North) Tollway and the Bush Turnpike are among the largest public infrastructure projects undertaken in Dallas during the past fifty years."

The study found that the funds spent to build the DNT and the Bush Turnpike, including the DNT extension between SH 121 and US 380, totaled almost 1.6 billion inflation-adjusted dollars, which paid for 25,000 person-years of employment and added almost \$2.6 billion to the regional economy. Looking at the current impact of tollway construction, the study found that the annual operations of NTTA were generating about \$88 million in economy activity and supporting over 1,000 jobs.

The study also found that since construction began on the first segment of the DNT in the 1960s, about \$28 billion of valuation had been added to the Dallas, Collin and Denton County tax rolls, bringing in about \$562 million in annual property taxes for the counties, cities and school districts along the Tollway and Turnpike. As Dallas Real Estate Investor and tollway driver, Darryl Freling, put it, "Fortunes have been made up and down the toll road."

In 2006, NTTA increased the economic impact of area toll roads even further. At the southern end of the DNT, work began on the renovation of the oldest section of roadway in the system. Through the joint efforts of the Dallas District of TxDOT, the City of Dallas, Dallas County and NTTA, the \$50 million upgrade plan included widening Oak Lawn Avenue from IH-35E to Maple Avenue from four lanes to six lanes, replacing the DNT bridge over Oak Lawn Avenue and widening the DNT between Maple Avenue and Harry Hines Boulevard. For the Main Toll Plaza, NTTA developed a new design that was so much quicker, easier and less costly to build that it was adopted for all future toll plazas.

At the northern end of the DNT, only a year after breaking ground for construction of the Phase 3 Extension in Frisco, planning was beginning on for Phase 5 in Grayson County.

For the Lewisville Lake Toll Bridge, NTTA worked with Denton County, TxDOT, the U.S. Army Corps of Engineers, and the cities of Little Elm, Frisco and Lake Dallas to complete the project's permitting stage and move toward contracting the construction. With a distinctive tied arch design as its signature feature, the bridge promised to be a trend-setting roadway.

As the final design of the Eastern Extension of the Bush Turnpike was underway, TxDOT agreed to provide right-of-way funding through a toll equity grant that would reduce NTTA's funding risks. To facilitate construction of the Eastern Extension, collaborative contracts were either signed or authorized with Rowlett, Sachse and Garland, the three cities that would be involved.

For the PGBT, the North Central Texas Council of Governments added fourth lane in its 2030 regional plans.

And on the western side of the Metroplex, the Southwest Parkway, which would link downtown Ft. Worth with Cleburne in Johnson County, was being designed with aesthetic features that would make the roadway a regional landmark.

As the number and complexity of NTTA projects increased, the number of both public and private entities involved also increased. In recognition of this trend, NTTA developed tolling services agreements (TSA) that have brought more private parties into NTTA projects and become a fundamental component of both public and private partnerships.

It was also through partnerships with private enterprises that NTTA developed an all-electronic toll collection (ETC) system, a technological innovation that would save time, increase convenience, eliminate the need for toll plazas, reduce capital requirements and lower operating costs. The system even accommodated collection from motorists without TollTags. The first all-electronic TSA was negotiated to collect tolls on State Highway 121 and the same technology was to be incorporated on the Southwest Parkway.

NTTA also applied new technology to make tollway driving safer in 2006 by implementing an integrated system of more than 500 roadway cameras,

weather sensors, incident-management software and dynamic message signs. In pilot tests conducted in 2005, the Intelligent Transportation System (ITS) efficiently provided drivers with real-time information about traffic and road conditions, increased safety and minimized delays. U. S. Secretary of Transportation Norman Mineta visited NTTA ITS facilities to observe first-hand how leading-edge transportation management technology was being applied. What he found was the most advanced system in the nation.

To enhance the security of tollway drivers, NTTA implemented two important new measures. First, In cooperation with the Department of Homeland Security, 400 NTTA employees in the toll collection, maintenance, and command center completed special Highway Watch security awareness training. The second measure established a backup NTTA command center at a remote site in case of the destruction or evacuation of the primary site.

NTTA also used advanced technology to enhance customer service. Technology-assisted productivity boosts enabled NTTA to handle more than 1.85 million customer contacts, an increase of 15% over 2005, with a staffing increase of only three percent. Increased website functionality and automated voice recognition telephony enabled customers to manage their accounts 24/7 and reduced costs per contact. In 2006, 30 percent of customers selected these self-service options compared to 27 percent the previous year. In recognition of this impressive performance, the world's leading customer contact support organization, ContactCenterWorld.com, certified NTTA's Customer Service Center as one of the top 50 "Best of the Best" for 2006.

In May, NTTA initiated a "Mystery Driver" program to enhance their understanding and management of customer experiences. More than 3,000 drivers registered to take part by completing monthly customer experience surveys. In addition, 25 to 30 drivers were randomly selected to log their experiences in several key areas. Information gathered by the program was used to optimize NTTA customer experience.

To streamline internal processes, improve productivity and enhance safety, NTTA formed three new departments: the Business Solutions Department, the Project Development and Planning Department and the Security and Incident Management Department. In addition, Maintenance, Communications, Project Development and Human Resources departments developed long-range plans to guide budgeting, capital, and staffing decisions. NTTA also revised their internal procurement process to

implement new guidelines under which contracts were awarded for maintenance management consulting, construction management, and total routine maintenance for the Bush Turnpike.

In fact, NTTA used technology to enhance efficiency and effectiveness in almost every area of their operations:

- At toll plazas, the use of technology reduced the violation rate by 17 percent, resulting in additional revenue.
- An expanded array of DVD and computer-based training programs significantly reduced training costs.
- An updated police radio infrastructure increased area coverage by more than 50 percent and improved the safety both officers and the public.
- More than 500 video cameras used for security and incident detection were upgraded to internet protocol, reducing the need for server storage space.
- New pavement engineering standards both enhanced the driving experience and reduced maintenance costs.

In recognition of the innovative TollTag interoperability NTTA achieved with DFW International and Dallas Love Field Airports, the International Bridge, Tunnel and Turnpike Association (IBTTA) awarded NTTA their 2006 Excellence Award. In presenting the award, the IBTTA noted, “The nature of the agreements between NTTA and DFW Airport, and NTTA and Love Field, is an exemplary model of successful governmental relations and a textbook case study in the ability of focused, determined public organizations working together for the benefit of their mutual constituents and customers.” In addition to the accomplishments recognized by the award, NTTA also extended TollTag interoperability to toll lanes, parking areas, and ground transportation systems such as taxicabs and shuttle buses.

To facilitate statewide TollTag interoperability, NTTA developed SmartHub[®], a system that connected each tolling agency to a central hub. In 2006, the Texas Turnpike Authority joined NTTA and the Harris County Toll Road Authority in the system and the Cameron County Regional Mobility Authority began testing it for implementation in 2007.

NTTA's use of technology also allowed them to solve a long-standing challenge presented by rental cars. If the driver of a rental car failed to pay a toll, the violation notice was sent to the rental agency. For the rental agency, getting the driver to pay involved time and money. To address this issue, NTTA piloted a program with two car rental agencies that allowed them to offer their customers the option of traveling toll road express lanes, similar to the way they offer insurance coverage. The pilot program worked so well that the rental agencies expanded the program into other areas of interoperability throughout Texas. Altogether, the program's innovative approach produced an efficient, cost-reducing and revenue-enhancing solution for both industries.

By the beginning of 2007, NTTA was firmly established as the single greatest facilitator of economic growth in North Texas and the toll road industry leader in the application of advanced transportation management technology.

NTTA

Chapter Four – 2007

Unprecedented Achievement

In 2007, NTTA expanded its Board of Directors to nine members, two appointed from each member county (Collin, Dallas, Denton, and Tarrant), and one from an adjacent county appointed by the Texas governor. This new Board would lead NTTA through a year of unprecedented accomplishments.

In January, ground was broken and construction began on the Lewisville Lake Toll Bridge. The 1.7-mile bridge was being built as part of a 13.8-mile corridor to connect the Dallas North Tollway in Frisco to IH 35E in Lake Dallas. By the end of the year, the first set of bridge beams were hung in place. With its signature 360-foot lighted tied arch near the center, the bridge was scheduled to open to traffic in 2009.

In September, the Dallas North Tollway Phase 3 opened to traffic. Completed in less than three years, the 9.6 mile section connected SH 121 to U.S. 380, extending the length of the DNT by almost one-third at a cost of \$264-million.

At the southern end of the DNT, the complete renovation of the oldest section of the road continued with demolition of the original main lane toll plaza at Wycliff Avenue. The pavement from Lemmon Avenue south to IH 35E would also be reconstructed and the Cedars Springs Road bridge was to be replaced. Completion was scheduled for late 2008.

Also in 2007, NTTA issued \$125 million of commercial notes and committed \$25 million to finance the feasibility study and design of the Southwest Parkway and President George Bush Turnpike (PGBT) Eastern Extension projects.

The Eastern Extension project also received a boost when the Texas Transportation Commission (TTC) authorized TxDOT to provide NTTA with a Toll Equity Grant of \$160 million to be used for the acquisition of right of way, relocation, utility adjustments, and related costs and services. The TTC also authorized a project agreement between NTTA and TxDOT that included toll revenue sharing, an arrangement that confirmed the long-term

financial relationship between the two agencies and the north Texas region.

Of all the roadway financing, development and construction goals NTTA achieved in 2007, none was more challenging – or more important to the growth and prosperity of North Texans – than gaining control of the 121 Tollway.

By 2007, TxDOT had constructed the first new section of State Highway 121, planned to become one of the most important toll roads in the state, if not the nation. At that time there was a desire at the highest levels of state government to privatize certain public functions, including the design, financing, building, operation, and maintenance of SH 121 in Collin, Dallas, and Denton counties.

In considering this opportunity, former NTTA Board Chairman Paul Wageman recalled, “In those days the agency really focused on building a segment at a time. It had a strong credit rating, so there was no real financial risk. Our constituency, the region, didn’t have a desire for us to do anything more than that.”

State Senator John Carona, representing District 16 of central and suburban Dallas County, recounted, “The philosophy of the Texas Transportation Commission’s leadership at that time was largely focused on engaging new outside private investment, a philosophy that was based on ‘transferring risk’. It appeared to many of us in the legislature that the commission favored Cintra for public/private partnerships [*one of the largest private developers of transport infrastructure in the world, headquartered in Madrid, Spain*]. In fact, the commission did preliminarily award the SH 121 contract to Cintra.”

But many legislators were not in favor of losing the local representation, governance, and reinvestment of toll revenues in favor of foreign investment. Senator Florence Shapiro of State District 8, representing Collin County, expressed a strong opinion: “Local control and local reinvestment of toll revenue were critical. That was the whole reason the legislature established NTTA in the first place. The supposed benefits of privatizing a major piece of our infrastructure were not worth giving that up.”

Senator Carona concurred: “I am an advocate for local control. Over the years that transportation funding at the state level has been sparse, it has

become increasingly important to hold onto those dollars collected right here in North Texas. That is best facilitated through local oversight.”

Dallas County Judge Clay Jenkins observed, “Local control is important for several reasons. Democracy works best when those vested with solving problems are closest to the problems and needs.”

After soliciting private sector bids for the SH 121 project, the North Central Texas Council of Government’s Regional Transportation Council (RTC) and TxDOT requested that NTTA submit a comprehensive public sector proposal to be evaluated alongside the leading private sector proposal.

Former NTTA chairman Paul Wageman vividly recalled, “It was late on a Friday afternoon, and I received an email from Senator Carona. He basically said, ‘Paul, if you were given the chance to bid on this, what would NTTA pay for 121? We know what Cintra will pay because they’ve already revealed their bid. What would you all do? And by the way, you only have X days to get back to me.’ That set off this mad dash.”

NTTA immediately pulled together a team of managers from every key area to rapidly prepare a bid for what could be the most important single project in the agency’s history. Elizabeth Mow, NTTA’s infrastructure Assistant Executive Director, remembered, “When they called us, we all mobilized, and then it was over in less than two weeks. But it had a lasting impact on us. It opened up the possibilities for NTTA. It showed us that we could do it, even when we didn’t have a lot of money. It showed us that working with others we were better. . . We had the confidence, our teams came together internally.”

At the same time, the legislature passed Senate Bill (SB) 792 that solidified NTTA’s standing as the toll road provider for the North Texas region. The bill gave NTTA the right of first refusal on any tolled project in North Texas and specified that NTTA would provide toll collection services on all toll roads in the region regardless of who developed the project. In addition, SB 792 included a provision that NTTA be allowed to develop the SH 121 project if the agency offered the best financial value to the region.

After rapidly assembling its best projections and calculations, NTTA submitted a bid that equaled or exceeded the private sector bid in every key area. One particular provision set NTTA proposal apart: Rather than making a series of payments to the State over time, NTTA would make an upfront payment of \$3.2 billion, more than the entire TxDOT budget for Dallas and Ft. Worth for the years 2006-2008.

In the end, NTTA won the contract because they not only provided superior economic value and offered a number of other benefits as well, including:

- Operations and customer service already in place,
- An established customer base of 1.4 million active TollTag users,
- A history of successful construction, financing, and operation of roadways, and
- A strong financial system with ready access for funding.

Senator Carona concluded, “What became of prime importance to elected leaders representing North Texas was that NTTA bid was from a locally controlled entity where any excess revenue was to be applied to transportation projects in our region.”

The Texas Transportation Commission, the Dallas District of TxDOT, the RTC and NTTA finalized the historic project agreement and scheduled NTTA to assume full responsibility for SH 121 in September 2008. By the terms of the agreement NTTA was to develop, finance, design, construct, maintain, and operate the segment of SH 121 from McKinney to Coppell for the next 50 years. This partnership assured that all the upfront payments and ongoing toll revenues generated by SH 121 would remain in the Dallas-Fort Worth region, supporting other infrastructure projects and contributing to the local economy.

Another provision from the 2007 legislative session was the requirement that TxDOT and the local toll entity must mutually agree on the financial aspects of a project in advance. For North Texas toll projects, TxDOT and NTTA would work together to determine the market valuation of projects as well as the terms and conditions for funding. Otherwise, no roadway could be developed by either party as a toll road. In addition, TxDOT was required to assist local toll entities in the completion of projects by providing right-of-ways owned by TxDOT, subject to reimbursement for actual historical costs. Access to the state highway system was also ensured by entering into agreements with local toll entities.

By working together to reach these agreements, TxDOT and NTTA assured that projects would be developed in a fiscally responsible manner and funds would be provided for toll roads as well as additional infrastructure projects in North Texas.

To meet their obligations under the agreement, NTTA issued \$3.4 billion in Series 2007 Bond Anticipation Notes for the acquisition and construction of

SH 121, including an agreed-upon upfront payment of \$3.2 billion to TxDOT to be used for other mobility projects within the region.

Denton County Judge Mary Horn witnessed the dramatic impact such funding had at the local level. “That upfront payment has been just critical for projects all over Denton County. We used approximately \$835 million to jumpstart the IH 35E widening and reconstruction project that is going on today,” she said. “The funding from 121 and the bond election that we passed allowed us to do the work that’s ongoing on FM roads 1171, 407, 423, SH 377, and everything that feeds into SH 121 and IH 35E.”

When asked his thoughts about actually handing over the ceremonial check for \$3.197 billion, former chairman Wageman paused and reflected, “It was a *lot* of money. But it was important for NTTA. I felt strongly that we should be the builder of the toll roads in our region. That’s why we were created in 1997.”

Not as dramatic but also a major milestone for 2007 was NTTA’s expansion of its innovative Intelligent Transportation System (ITS) to all NTTA roadways. In recognition of the system’s ability to detect and alert drivers of rain, ice and other possible driving hazards in real time, the American Public Works Association awarded NTTA with their Excellence in Snow and Ice Control Award.

NTTA’s TollTag program also received special recognition in a May 19, 2007 *USA Today* article entitled “25 years of ‘Eureka’ Moments.” The article listed 25 “inventions that have changed our lives since 1982” with NTTA’s introduction of electronic tolling in 1989 listed as number 14.

Dallas real estate developer and tollway driver, Darryl Freling, described the benefits of the program this way: “I was one of the first TollTag holders. Before the TollTag, the lines were long and so much slower to pay at a tollbooth. A toll road is all about speed and efficiency, and the TollTag certainly facilitated that. I don’t know how you could live without a TollTag now.”

Inspired by the success of TollTags, NTTA then developed Zip Cash technology to facilitate all-electronic toll collection (ETC). “The switch to all-electronic toll collection kind of started by accident,” recalled NTTA’s Director of Customer Service, John Bannerman. “A semi tractor-trailer rig crashed into our main lane Plaza 1 and forced us to close several lanes. The reduction in lanes caused traffic to back up. Since we had to rebuild the plaza anyway, we thought, ‘What are our options? Do we rebuild the

structure again and do business as usual? Or is there a way to move cars through quicker?’ That’s when we came up with the idea of all-electronic toll collection. We realized we could not only improve mobility, but we could eliminate many of the costs associated with collecting cash.”

ZipCash technology was similar to TollTag technology, only Zipcash sensors read license plates rather than electronic transponders as vehicles passed through the toll plaza. This enabled cash customers who did not have a TollTag to pay the slightly higher cash rate from a toll invoice sent to their home address.

Most of the technology was already in place in the form of TollTag readers mounted overhead on the express lanes and cameras positioned to photograph the license plates of violators. To make an all-ETC plaza, the overhead gantry would simply have to be extended all the way across the roadway to support multiple readers and high-speed infrared cameras. Software was developed in-house, and NTTA partnered with the State of Texas to maintain accurate and up to date vehicle registration data.

ZipCash technology completely eliminating the need for toll booths. Once the system was installed and operating, even the most casual observer could see a dramatic improvement in traffic flow. Dallas commuter, Curtix Stipe recalled, “I remember them taking out the toll booths. It really opened up traffic when they did that. Back when they first put in the TollTag-only lanes, it did help traffic move faster, but it would still get caught up around the toll booths and slow things down. When they took out the tollbooths, it was a welcome change from a commuter standpoint. You didn’t have the bottlenecks to slow you down anymore.”

Based on the success of ZipCash, NTTA’s Board commissioned a study to determine the feasibility of converting the entire NTTA system to ETC. As benefits, the study identified shortened drive times, motorist and employee safety, engineering and construction costs, and reduced vehicle emissions due to the elimination of stop-and-start driving. Since the system would eliminate the need to build new toll plazas, the move to an all-ETC system would also realize significant capital cost savings. As a result of these findings, NTTA’s Board approved a gradual system-wide transition to all-ETC, to be completed by 2010. Hemphill concluded, “The switch to all-electronic toll collection was a huge undertaking. We were one of the first toll road systems in the nation to make the switch.”

Aware of all the implications a switch to ETC would bring, NTTA put a program in place before the move was even announced that included

aptitude testing, specialized training and career counseling to assist more than 400 toll collection and vault department employees transition to positions in other areas of NTTA operations.

Looking at the year as a whole, Chairman Wageman reflected, “To me, 2007 was a pivotal point for the whole agency, with both the legislative changes that occurred and the decision to take on the 121 Tollway. I think 2007 was an existential experience for us. It really came down to, ‘Do you want to be a full-fledged regional provider of transportation solutions, or do you want to just take care of what you have, maybe even fold your tent up and call it a day?’”

NTTA not only chose to become a full-fledged provider of transportation solutions, they chose to become the full-fledged provider of transportation solutions for North Texas.

NTTA

Chapter Five – 2008

Thriving Through the Recession

No sooner had NTTA had gained control of the 121 Tollway project and made the largest single financial commitment in its history, than the worst recession since the Great Depression hit – and the challenges it brought were the greatest NTTA had ever faced.

Paul Wageman, found the events of that period unforgettable. “We made a commitment to give that \$3.2 billion, and we had 45 days or so to do it,” the former NTTA chairman recalled. “When we were making the deal, it was a good market. We were relying on projections from our financial advisor and they were probably more rosy than you would say today,” he said with a laugh. “No one foresaw that the worst recession since the Great Depression was about to happen.

The market seized up. Had we been given maybe three more months, we could have issued permanent debt. What we ended up issuing was like a bridge loan, like one-year notes, in a very difficult market. While we were taking those notes out, two of the three major banks we utilized went bankrupt. Bear Stearns went bankrupt literally four business days after they closed our transaction, and Lehman Brothers went bankrupt one week after it closed a \$2 billion transaction for NTTA. Citigroup was the one that didn’t, but their stock was trading at a dollar or less. The bottom fell out of bond market; we had to figure out new ways to pay for it.”

Victor Vandergriff of Fort Worth, who was Vice Chairman of NTTA’s Board at that time, explained, “There were federal programs that helped fill the gaps caused by the frozen credit market. The TIFEA Program helped provide upfront equity that the bond markets reacted favorably to, and TIGER grants were also available.”

TIGER, DOT’s Transportation Investment Generating Economic Recovery Discretionary Grant Program invests in critical road, rail, transit, and port projects across the nation.

TIFIA, the Transportation Infrastructure Finance and Innovation Act of 1998, established a federal credit program that leveraged federal funds to attract private co-investment for the support of critical improvements to the

nation's surface transportation system. Under the program, the U.S. Department of Transportation (DOT) is authorized to provide secured loans, loan guarantees, and standby lines of credit to state departments of transportation, transit operators, special authorities, local governments and private entities.

According to DOT, “The public policy underlying the TIFIA Program asserts that the Federal Government can perform a constructive role in supplementing, but not supplanting, existing markets for financing large transportation infrastructure projects. . . . When compared to most investors, the Federal Government has a naturally longer-term investment horizon, which enables it to more readily absorb the relatively short-term risks of project financings. Absent typical capital market investor concerns regarding timing of payments and financial liquidity, the Federal Government can become the ‘patient investor’ whose long-term view of asset returns enables the project's non-Federal financial partners to meet their investment goals, allowing the borrower to receive a more favorable financing package.”

Thanks to these programs, NTTA was able to sell \$5.16 billion worth of bonds at an average rate of 5.66 percent in 2008. This allowed NTTA to retire short-term bond anticipation notes (BAN), raise funds for the permanent financing of the 121 Tollway and sustain the capacity for future financing. By achieving such low-cost funding, NTTA maintained an “A” rating on its senior lien debt. NTTA’s First Tier bonds were rated “A2” by Moody’s and “A-” by S&P. All in all, NTTA’s net revenues for 2008 were 1.79 times the amount needed to cover the authority’s debt service, well above the amounts mandated.

The financing of the 121 Tollway project was so successful it was named by *The Bond Buyer* magazine as the Southwest region’s “Deal of the Year” award winner in the large deal category. Awards were based on innovation, financial complexity, the ability for a deal to serve as a model for other financings and the public purpose for which a transaction’s proceeds were to be used. “It was a recognition of our smart, creative people who worked through that process, using the best tools available,” Vandergriff proclaimed.

In October, TxDOT and NTTA entered into a partnership that advanced three critical mobility projects: Southwest Parkway, Chisholm Trail Parkway and SH 161, a section of road the would extend the western end of the President George Bush Turnpike southward to IH 20 in Grand Prairie.

NTTA exercised its right of primacy on SH 161, but the tightening of credit markets temporarily eliminated some traditional financial instruments such as the capital appreciation bonds that had been used in the past. Financing the Southwest Parkway and Chisholm Trail projects would require more innovative thinking. “We developed a plan to have the state of Texas back our revenue stream with what they called a toll equities loan,” Vandergriff explained. “TxDOT, with its triple-A credit rating, acted as a co-signer. We got TxDOT on board with us to backstop the project with that loan guarantee, we got a TIGER grant to help secure TIFEA funding, and then we put the projects out.” This partnership not only allowed NTTA to deliver the combined projects; it also relieved TxDOT of its commitment to build two costly interchanges.

“Southwest Parkway was put on the Fort Worth master plan in 1965,” said Jungus Jordan, a Fort Worth city councilmember. “The right of way had been there for 52 years, but we couldn’t get the oomph to get it built. In the early 1970s the cost of the road was estimated at \$170 million, with plans to build it as a non-tolled highway. The city council adopted design standards for the road in 2005. The corridor master plan included downtown to Dirks Road. The south end was called Chisholm Trail, and it was mostly greenfield.”

Former NTTA chairman Paul Wageman said, “We got involved to build Chisholm Trail after folks in Tarrant County had been trying to get it built for over 50 years.”

Jordan continued, “There was already gridlock on the roads in southwest Fort Worth, and there was concern that it would affect economic development and property values in the area. Of course, there were some citizen groups and community groups that were against a major road going through their neighborhoods.”

The greatest objections came from the most formidable property owner roadway was routed to encounter, the Union Pacific Railroad.

The Union Pacific’s Davidson Yard was one of their biggest, a massive 385-acre complex that included 50 miles of track and handled 500,000 rail cars per year – and the Southwest Parkway was routed directly across the yard’s “hump lead”, a hill built into the yard so gravity can be used to separate cars and reassemble them onto different trains. Understandably, Union Pacific did not want the Davidson Yard operations disrupted -- temporarily or permanently -- by a new road.

Wageman recalled, “There was a regulatory process we could have gone through with the Federal Surface Transportation Board to basically try to obtain the right of way from them at some reasonable cost. But I knew that could take years, would get lawyers involved, and cost who knows how much. Fort Worth Mayor Mike Moncrief and I just decided to just try to make a deal with UP and pay what we needed to pay that would be fair for everyone.

We had detailed, ongoing negotiations. We even instituted a conference phone call with Mike, me, and UP CEO Jim Young to keep everyone in the loop. This went on for months. We finally settled on close to \$100 million, of which we were paying half and Fort Worth the other half.

We signed an agreement, and when I got back to my office I got a call from Mayor Moncrief. I’ve known Mike a long time, served on a commission with him, and I love this. He said, ‘Paul, Fort Worth doesn’t have the \$50 million . . .’ I said, ‘What? You just signed the agreement!’ And he continued ‘. . . we don’t have the money *now*, but we’ll get it.’ You know where they got it? From the RTC—out of the \$3.2 billion NTTA had paid in!”

In the agreement, Union Pacific, NTTA and the City of Fort Worth agreed to design, construct, and test a temporary hump track system that would demonstrate the feasibility of building an overhead road without disrupting the railroad yard’s operations. If the tests proved successful, Southwest Parkway would be the first road in the country built over a Union Pacific rail yard hump lead.

Looking beyond the Davidson Yard issues, Councilmember Jordan stated, “Even with NTTA involved, it appeared there was no way to fully fund Southwest Parkway. Toll revenue projections came up several hundred million dollars short. But when the American Recovery and Reinvestment Act was passed, almost \$50 billion of federal stimulus money was earmarked for spending on “shovel ready” infrastructure projects. The new interchange at IH 20 met the criteria, and the federal government provided \$200 million for the project. The interchange was vital to relieve the gridlock on Hulen Street and Bryant-Ervin Road around Hulen Mall. TxDOT took ownership of the project and began construction.”

At the other end of the PGBT, construction began on an Eastern Extension that would run from SH 78 in Garland, through Rowlett, across Lake Ray Hubbard to IH 30 In Sunnyvale.

Also in 2008, the renovation of the south end of the DNT was completed. In just two years, the \$50 million project completely transformed the segment from Lemmon Ave to IH 35E, with improvements that included:

- Broadened lanes,
- Multiple new bridge structures,
- Improved access from surface streets,
- Enhanced roadway lighting,
- Median barriers,
- Sound walls,
- All-ETC implementation, and
- Additional safety improvements.

The National Asphalt Pavers Association recognized the quality of these renovations by awarding NTTA their “Quality in Construction” award.

In the spring of 2008, before the 121 Tollway became part of the system, NTTA began to collect tolls on an interim basis for TxDOT, which was operating the section of the road that had been completed. This first application of ETC technology for a third party would prove especially valuable when managed lanes were introduced to state highways to improve traffic flow.

And in October of 2008, only a month after gaining control of the SH 121 project, NTTA awarded an almost \$220 million contract for the construction of Segment 4, the largest single contract NTTA had ever awarded. The segment would include the four-level interchange with U.S. 75 in Collin County, which was projected to open in January 2011.

As NTTA’s role as the primary builder of new roadways in North Texas grew, so did the number of partnerships they formed with other government agencies to facilitate their work. In 2008 alone, NTTA collaborated, consulted and worked alongside the North Central Texas Council of Governments (NCTCOG), its Regional Transportation Council (RTC), TxDOT, the Federal Highway Administration (FHWA), the U.S. Army Corps of Engineers, the Dallas Area Rapid Transit authority (DART), Dallas County, Collin County, Denton County, Tarrant County, and the cities of Dallas, Garland, Rowlett, Sachse, Allen, McKinney, and Fairview.

Jungus Jordan, who also served as the chairman of the Regional Transportation Council in 2007 and 2008, commented, “The RTC is a regional group of 43 members; it should have regional partner. NTTA has evolved into a strong player with the expertise, financial strength, footprint, and organizational structure to be a valuable provider of regional mobility solutions.”

Elizabeth Mow, NTTA's Assistant Executive Director of Infrastructure and previous Director of Project Delivery, observed, "Locally, we have very good relationships with our peer agencies, TxDOT, regional planners, the counties, the cities . . . It's a necessity. We couldn't build roadway projects, we couldn't operate and maintain roads, we couldn't do snow and ice removal, we couldn't do all those things we do very well without our partners. We've come a long way in that regard. I'm very proud of the relationships we've all built together."

As NTTA's system of roadways expanded, so did their emphasis on customer safety and service.

On September 1, 2008, the day designated for NTTA to officially take over the 121 Tollway, the Authority initiated a Roadway Customer Service (RCS) program designed to keep customers safe and traffic flowing smoothly. The pilot program, conducted throughout 2008, involved specially equipped and marked NTTA service trucks patrolling the 121 Tollway 24/7 to assist customers in need by:

- Providing protection from traffic,
- Changing flat tires,
- Providing gasoline and water
- Jump-starting dead batteries,
- Moving vehicles off the roadway, and
- Providing directions or driving customers to a safe location.

While assisting an average of 162 stranded customers every week with free-of-charge services, RCS personnel also served as first responders, providing protection and assistance on the scene until police, fire, or other emergency response teams arrived.

Eric Hemphill, Director of System and Incident Management for NTTA, emphasized, "Safety is always our first concern. We want to do everything we can to keep customers safe on our roads. There's also a very practical benefit: an accident involving a stalled vehicle requires a lot more resources, a lot more time, lanes are closed, traffic gets bogged down, and NTTA employees and emergency personnel are put in danger as well. So for the cost of a gallon of gas, we've reduced fire, police, and EMS resources, road closures, and traffic tie-ups that frustrate our customers and often cause secondary accidents."

Having the RCS team respond to routine incidents allowed the Texas Department of Public Safety to expand its coverage area without deploying additional officers and concentrate their efforts where they were most

needed. The RCS pilot program showed that 85% of incidents did not require police action. Based on the success of the pilot program, NTTA expanded the RCS program to the rest of the system in 2009.

Also in 2008, NTTA continued to develop ways to make TollTags more convenient and attractive to customers. A pre-paid TollTag account was introduced that allowed customers paying cash to pay the lower TollTag toll rate without having a credit card tied to their account. By paying a predetermined amount in advance rather than waiting to pay a ZipCash bill, cash customers could save significantly on their toll bills.

In addition, NTTA expanded their Third Party TollTag Vendor Program by providing even more convenient locations. Motorists could now obtain a TollTag or make payments on their accounts at a broad range of outlets including government and municipal offices, grocery stores, apartments, and entertainment complexes. With this expansion, the number of municipalities selling TollTags more than doubled from 15 in 2007 to 34 by the end of 2008. NTTA also redesigned the TollTag itself by replacing the hard plastic case with an unobtrusive adhesive sticker similar to a vehicle registration sticker.

Internally, 2008 saw important initiatives in diversity and accountability launched at NTTA in 2008.

The Authority created a Business Diversity Department to ensure that qualified minority- and women-owned vendors got the opportunity and necessary information to participate in NTTA's procurement process in all areas of operations.

NTTA also established an Internal Audit Department to improve the efficiency of the organization's systems, processes and business practices. The Internal Audit Department was charged with helping all NTTA departments work together effectively, facilitate best practices, identify untapped opportunities and coordinate cross-functional teams working to meet common goals.

Despite the effects of a crippling recession, NTTA succeeded in making 2008 a banner year.

NTTA

Chapter Six – 2009

New Approaches, New Successes

To successfully finance the largest road development project in NTTA's history during an extreme economic downturn required the adoption of a new approach to roadway financing.

Chairman Paul Wageman recalled, "This was an agency that used to take eight or nine years to build a single segment, because they waited until it was fully financially feasible. What NTTA was doing now was building roads before they were completely financially feasible as toll roads because they were important mobility projects for North Texas. It takes a strong financial system to allow you to do that. You assess the need, you plan, and you make what you feel are prudent decisions because long-term those roads will produce significant revenue to the agency. That was a huge paradigm shift for NTTA."

Denton County Judge Mary Horn reinforced NTTA's new approach to financing with some eye-opening statistics: "It was just absolutely critical with our extreme growth," she stated. "Between the census years 2000 and 2010, Collin County was fastest-growing large county in the state, with more than a 59% increase in population. Denton County had a 53% increase in population. That's phenomenal! On top of that, since the census in 2010 through 2014, of counties over 500,000 population in America, not just the state of Texas, Denton County was the second-fastest growing, and third was Collin County. So we're still exploding in population. We could not have started these road projects at a better time."

NTTA was now a regional mobility provider, not just a builder of toll roads. To fulfill this expanded role, NTTA's Board of Directors developed and implemented a new five-year strategic plan. To that end, cross-departmental teams were assembled to map out action plans with short- and long-term goals that included:

- Maintaining a financially sound and vibrant financial system, including a quality audit program, reserves policy, and cost-effective bond rating;
- Providing innovative tolling and toll road solutions, including a focus on environmental responsibility;
- Functioning as a customer-driven organization, with continued improvement of the customer experience;

- Being a respected leader and partner in the region's transportation network, including effective outreach to local governments and their inclusion in the planning process;
- Fielding a highly qualified, energized and focused team supported by a competitive compensation program and a culture that values outstanding performance; and
- Assessing, improving, and implementing stakeholder communications programs to maintain open, honest relations.

Ironically, as NTTA's role was expanding, their budgets were shrinking. In 2008, the recession forced NTTA to reduce their budget by six percent. As the recession continued into 2009, NTTA had to further reduce spending by another \$108 million, which they achieved by trimming the budgets for capital improvement, reserve maintenance, and feasibility study funds.

As a further response to the Great Recession, NTTA implemented a toll rate increase in the summer of 2009 that had originally been scheduled for January 1, 2010. The increase was deemed necessary to ensure that NTTA maintained the ability to meet their financial commitments. The measure aligned tolls with the regional toll rate adopted by the Regional Transportation Council in April 2006 and unified toll rates within the region through distance-based tolling. At toll plazas and ramps serving shorter travel distances, rates actually went down.

To reduce their operating expenses, NTTA set out to lower borrowing costs by restructuring their finance plan. Integral to the plan was support from the state. During a special legislative session, NTTA was granted additional bonding authority for up to 40 years for the financing of the SH 161 project and certain other projects that were previously limited to 30 years.

NTTA also took advantage of Build America Bonds (BABs) that became available as part of the American Recovery and Reinvestment Act of 2009. BABs were taxable bonds that offered a 35 percent interest rebate to the issuer. Due to market conditions in the taxable bond market, the overall borrowing cost for BABs was significantly lower than it was for tax-exempt bonds. As these bonds were to only be available through 2010, NTTA financed most of its 2009 construction costs by issuing BABs.

The construction those bonds financed included many impressive milestones:

In 2009, the 121 Tollway was officially re-named the Sam Rayburn Tollway (SRT) in honor of the late congressman from North Texas who represented Texas' 4th Congressional District from the beginning of Woodrow Wilson's presidency in 1913 until the beginning of John F. Kennedy's presidency in 1961. He served 17 of his 43 years in congress as speaker of the U.S. House of Representatives, serving longer in that position than anyone else in history. One of his colleagues, Representative Thomas Abernethy of Mississippi, cited Rayburn as the most influential speaker in history because he could "work with liberals and conservatives, ran the House with a firm hand but was generous."

"Mr. Sam," as he was widely known, was one of the most influential Texans to ever serve in congress. He was also a transportation and infrastructure visionary who strongly supported the construction of the seminal cross-country highway Route 66, which opened in 1926. As a further expression of his vision, he coined the term "Sun Belt," when he famously stated that it was imperative for America to connect "the Frost Belt with the Sun Belt."

The SRT was formally dedicated with a ceremony in June. Several generations of the Rayburn family were on hand to unveil a plaque in commemoration of the corridor's name change and recognition of Mr. Sam's devoted service to the region.

Another milestone was reached when Segment 3 of the SRT opened to traffic on September 29, three months ahead of schedule. The new segment extended 6.9 miles from Hillcrest Road to Hardin Boulevard just west of US 75 (Central Expressway), through the cities of Plano, Frisco, Allen, and McKinney.

On July 30, the Lewisville Lake Toll Bridge (LLTB) officially opened. Connecting the east and west shores of Lewisville Lake, the LLTB provided an important link between IH 35E and the Dallas North Tollway, providing Denton County motorists a much-needed alternative route to IH 35E going south into Dallas. Prior to the completion of the LLTB, driving from the city of Lake Dallas on the western shore of Lewisville Lake to Lakewood Village on the eastern shore involved a 40-minute trip around the lake. The LLTB shortened that trip to 10 minutes and reduced the distance traveled by 16 miles.

The process of completing the LLTB brought about a partnership among TxDOT, the Army Corp of Engineers, Denton County, NTTA and the cities

of Little Elm and Lake Dallas, all working together to plan, fund, and make improvements to the non-tolled artery roads leading to the bridge.

The bridge featured the most advanced features and techniques for long-term sustainability and minimal environmental impact. It was a showcase for environmentally responsible infrastructure design and construction, including an innovative storm water filtering system that captures and treats rainwater to prevent dirt, oil, and debris from contaminating runoff water. It is the only bridge in North Texas with such a filtration system.

The bridge's signature structural arches were constructed from steel that weathers to form a patina layer that requires no paint, minimizing ongoing maintenance costs. The concrete beams on the bridge were left uncoated and unpainted to eliminate the release of environmentally damaging volatile organic compounds and further reduce maintenance costs. These measures were so cost-effective that funds for other mobility projects in the region were freed up as a result. In recognition of the bridge's safety, efficiency and long-term environmental accountability, the International Bridge, Tunnel and Turnpike Association presented NTTA with its 2009 Toll Excellence Award in Social Responsibility.

Another NTTA milestone was the opening of SH 161 in time for the 2009 football season at the new Dallas Cowboys stadium. A product of coordinated cooperation among NTTA, TxDOT and the City of Arlington, SH 161 had opened as a TxDOT-owned road with NTTA installing the tolling equipment and operating the road. It now stood a prime example of how NTTA works with local governments to bring transportation ease and economic benefits to their communities.

2009 was also the year the President George Bush Turnpike was converted to all-electronic toll collection (ETC). This groundbreaking innovation not only kept traffic flowing smoothly by eliminating stops at toll booths, it also provided the technology to further improve NTTA's customer experience and service. NTTA Director of Customer Service, John Bannerman, said, "A big benefit was getting to know our customers better. We had always had information about our TollTag customers. ZipCash allowed us to find out information we could use to serve our customers better. For instance, we could see that this person was commuting five days a week, and still paying the higher ZipCash rate. Why did they not get a TollTag? We could see where a driver lived, and where they were getting on and off the tollway. Was there a reason they weren't taking advantage of the lower TollTag rates?"

Our communications department did focus groups, and we were able to ask good questions and get strategic information. We found out that it just wasn't convenient for some drivers to pick up a TollTag. Our philosophy is that we want to make it effortless for the customer. We determined that we needed some satellite locations. We opened TollTag stores in Fort Worth, in Irving, and planned to open others up in strategic areas so it's not a burden." Part of those plans expanded NTTA's Regional TollTag Partners program to make TollTags available at 84 additional municipal and retail partners in Collin, Dallas, Denton, and Tarrant Counties.

In June of 2009, NTTA's TollTag had its 20th anniversary. The DNT was the first toll road in the nation to use an electronic transponder system. During its first decade, more than 300,000 TollTags were issued. As more motorists realized the benefits of using a TollTag, cited as fewer delays, reduced tolls and interoperability with other facilities, that number jumped six-fold. In its second decade, more than 1.8 million TollTags were issued.

Longtime TollTag user, Johnny Aceves, expressed his appreciation for the service this way: "I've been a customer of the tollway since it was built," he said. "We saved having to keep quarters in the car all the time by getting a TollTag. I'm retired now, so I don't use it as much as I used to, but you can get just about anywhere you need to when you hop on the tollway."

In another improvement to customer service, NTTA did some fine-tuning on the ZipCash program. Having never received an invoice from NTTA, some ZipCash customers were initially confused about the process for billing and payment. To help customers distinguish each step in the payment and collections process, NTTA designed a new new three-step invoice process -- ZipCash, ZipCash Late Notice, and Violation Invoice -- and gave each step a distinct look. "We want to do everything we can to encourage motorists to pay for the use of the toll road before any late or administrative fees are applied to the transactions," explained Bannerman. "We want the customer's payment process to flow as smoothly as the driving experience."

In recognition of NTTA's technological, the Authority was awarded the 2009 Technology Adopter Award at the 9th Annual Tech Titans and Titan Fast Tech Awards. Sponsored by the Metroplex Technology Business Council, the largest technology trade organization in Texas, the awards recognize outstanding technology companies and individuals in the North Texas area who made significant contributions to the industry during the prior year.

While earning recognition for their use of high technology, NTTA used low technology to solve a critical life-and-death problem. The problem was that 2009 saw a tragic increase in accidents involving drivers going the wrong way on Metroplex expressways, including the DNT. The accidents occurred at different locations under different circumstances, but they could all be tied to drivers impaired by alcohol or controlled substances.

Although the incidence of wrong-way driving was no higher on the DNT than other major roads, NTTA decided to take action. “We spend millions of dollars every year to make sure our roadways are the safest in the region, and we are confident that our system meets every standard,” said NTTA Director of System and Incident Management, Eric Hemphill. “But our Executive Director said this was something we really needed to look into. We couldn’t just shrug and say it happens, people get drunk and drive, and they crash . . . We needed to figure out what was going on and what we could do about it.”

To address the problem, NTTA formed a task force to take an in-depth look at the incidents that occurred on NTTA roadways and evaluate the solutions that other agencies were using to curtail this national problem. The task force was charged with reviewing all designs and practices to determine if more could be done to combat mistakes made by impaired drivers.

“One area where we really broke new ground was with the ‘WRONG WAY, DO NOT ENTER’ signage,” Hemphill noted. “Everybody has signs on the exit ramps to tell a driver they’re going the wrong way. But those signs have been placed seven feet above the pavement, in accordance with the federal manual standards for crash safety. We determined that at that height, a car’s headlights don’t illuminate the sign as well as they could. In addition, an impaired driver is much more likely to be concentrating on the road, the curbs, the things that are down low in their field of vision. We experimented with placing signs at the three-foot level. It was evident that the lower signs would reflect more of a headlight beam and be more in the line-of-sight of an impaired driver.

We crash-tested the lower sign assemblies and proved that they could be safe. We shared our findings about visibility and safety with TxDOT, and TxDOT is now allowing a three-foot height for ‘WRONG WAY’ signs on Texas exit ramps. NTTA was the catalyst for that.”

NTTA also added one-way reflective, raised pavement markers at every exit ramp and added red reflective tape to the posts of “WRONG WAY”

and “DO NOT ENTER” signs to heighten their visibility. Using ITS cameras and roadway sensors to detect wrong-way drivers, NTTA was able to immediately alert law enforcement, then use dynamic messaging signs to warn oncoming traffic of the hazard. “The Wrong-Way Driver Task Force led us to adopt standards for countermeasures that can be incorporated into every new road and inexpensively retrofitted to existing roads,” Hemphill added.

NTTA’s leading-edge research and solutions in this area have led transportation agencies across the nation to seek NTTA’s expertise for their own roadway systems. In recognition of the success of their safety innovations, NTTA’s Wrong-Way Driver Task Force received the 2009 Project of the Year award from the International Association of Law Enforcement Planners.

To take its safety message directly to the motoring public, NTTA launched a program called Safe-T-Buzz. At a town hall meeting at NTTA headquarters, safety experts informed the public about what NTTA was doing to keep its motorists safe and how motorists could assist in that effort, from spotting possible drunken drivers to checking tires for tread wear. They also listened to customers’ ideas for additional countermeasures that might prove viable.

During the holiday season when risks were highest, NTTA partnered with Mothers Against Drunk Driving of North Texas to support MADD’s largest public awareness campaign, “Tie One On For Safety.” MADD created the campaign to encourage the public to take action against drunk driving by tying a red MADD ribbon to their vehicle’s antenna or side mirror. NTTA helped distribute thousands of ribbons throughout the Metroplex and MADD distributed ribbons at several NTTA events.

Internally at NTTA, 2009 saw major milestones achieved in the diversity and inclusion of minority or women-owned small business enterprises (D/M/W/SBE) in NTTA contracting opportunities. An NTTA Business Diversity Advisory Council was created to advise NTTA’s Business Diversity Department. Consisting of six members recommended by the Board, the Council represented regional organizations from both the public and private sectors.

To determine if D/M/W/SBE contractors were being utilized in proportion to their local market availability, NTTA participated in a joint Availability and Disparity Study facilitated by the North Central Texas Council of Governments. Other participants included the Cities of Fort Worth and

Arlington, Dallas/Fort Worth International Airport, the Fort Worth Transportation Authority and the Fort Worth Independent School District.

After launching Vendor Outreach Symposiums in late 2008, NTTA extended their business diversity program by hosting events in Dallas, Collin, and Tarrant counties. Designed to provide information about contract opportunities, the forums helped contractors understand the process of doing business with NTTA. Representatives from the North Central Texas Regional Certification Agency were also on hand to provide information about obtaining DBE- or M/WBE-certification.

To promote participation in contracting opportunities related to the Southwest Parkway (SWP), members of NTTA's Business Diversity and SWP Corridor Management departments participated in both the Fort Worth Entrepreneur Expo and Congresswoman Eddie Bernice Johnson's Infrastructure Stimulus Update in Dallas.

In addition, NTTA launched its Relationships and Opportunities Advancing Diversity (ROAD) program to facilitate relationships between vendors and increase the number and diversity of firms bidding for large contracts. The program provides D/M/W/SBEs with opportunities to increase their business management, organization, and professional skills by developing partnerships with established NTTA contractors.

NTTA's final milestones for 2009 were made online, when NTTA began using social media as a timely and cost-effective way to inform customers and motorists about its toll road initiatives, projects, and construction-related activity. The Agency joined Facebook, the most popular social network in the world, with a page that offered real-time information on lane closures, project updates, events, and other information for customers, motorists, or anyone interested in keeping up with NTTA.

On its website, NTTA continued to expand content and functionality to give viewers a clear picture of NTTA's operations, finances, and news. A new section tailored for investors provided system-wide and road-specific transactions, toll revenues and a comparison of actual performance versus projections. Business diversity department pages were added to promote events aimed at increasing vendor participation. A convenient new trip rate calculator enabled drivers to quickly determine the total costs of their trips on various NTTA roads. And answers to the most frequently asked questions about toll rates, payment options, road construction and traffic conditions were made quickly available in a user-friendly format.

2009, like 2008 before it, presented NTTA with great challenges. NTTA met those challenges, solved them and gained new insights. NTTA was not only stronger and more capable now, but nimbler and more creative as well.

NTTA

Chapter Seven – 2010

Financing, Operations, Employees

In 2010, NTTA's new approach to roadway financing continued to bear fruit.

When NTTA exercised its right of primacy on the State Highway 161 project in 2008, the Authority and TxDOT began to negotiate the market value of the project. TxDOT had already completed the road from SH 183 in Irving to North Carrier Parkway in Grand Prairie. NTTA would build the project southward to IH 20 in Grand Prairie, including interchanges at IH 30 and IH 20. Then NTTA would then own and operate the road. Taking these factors into consideration, the value both parties agreed on was more than \$400 million. In February, NTTA's Board of Directors voted to officially accept ownership of the President George Bush Turnpike (PGBT) Western Extension (formerly SH 161).

The Board also voted to continue advancing the Southwest Parkway/Chisholm Trail Parkway project in Tarrant and Johnson Counties, which presented a major challenge. "Deciding we could take on both projects was a real nail-biter for the Board," recalled NTTA Board Vice Chairman, Victor Vandergriff. "They were both big, important projects. Then we had to convince our staff that we should do both, and that we could do both." But making the decision to take on both projects at once was only the first challenge. Getting both projects funded would require an unprecedented partnership with TxDOT and the federal government.

The tightening of the credit markets had temporarily eliminated some traditional financial instruments, such as capital appreciation bonds, that NTTA had used in the past. Financing the projects would require a deep knowledge of infrastructure funding coupled with innovative thinking. "In a nutshell, we developed a plan to have the state of Texas back our revenue stream with what they called a toll equities loan," Vandergriff explained. "TxDOT, with its triple-A credit rating, acted as a co-signer. We got TxDOT on board with us to backstop the project with a loan guarantee; we received federal economic stimulus funds in the form of a TIGER grant to help secure TIFEA funding; and then we put the projects out." This arrangement allowed TxDOT to be relieved of its prior financial commitment to build two costly interchanges and allowed NTTA to deliver the combined projects.

The financing package for SH 161 was the only time in history that all of these federal, state, and local elements had been combined for one project. “It was a reflection of our smart, creative people who worked through that process, using the best tools available,” Vandergriff offered.

In another innovative financial move, NTTA financed the Western Extension as part of its newly established Special Projects System, which kept funds separate from the regular NTTA System. Using subordinated, non-trust agreement debt payable only from NTTA System surpluses, the Special Projects System could issue debt without putting either NTTA System’s resources or its credit rating at risk.

Sources of financing for the payment of the market valuation and the construction of the PGBT Western Extension included: a \$20 million TIGER grant to support a TIFIA loan of more than \$400 million; approximately \$580 million of revenue bonds to be repaid by future revenues from the Western Extension backed by a toll equity loan agreement with TxDOT; \$12 million from the Regional Transportation Council (RTC) for funding the Union Pacific Railroad overpass; and an equity contribution of approximately \$180 million from NTTA’s System to support the Special Projects System.

“For the right to develop and operate the PGBT Western Extension, NTTA made a \$200 million up-front payment to the North Texas region,” Vandergriff added. “The RTC will use that money to advance other non-tolled mobility projects in the region.” With this payment and the \$3.2 billion payment NTTA made for the rights to the Sam Rayburn Tollway, NTTA had directly contributed \$3.4 billion to fund non-tolled infrastructure in the area.

The TIGER grant also benefited the Southwest Parkway/Chisholm Trail Parkway project by offsetting funds that would have otherwise been directed toward the PGBT Western Extension and allowing NTTA to dedicate more resources toward closing the funding gap on the Southwest Parkway/Chisholm Trail project.

Putting some of this innovative funding to work, in February, construction began on the Sam Rayburn Tollway/Dallas North Tollway interchange. Begun ahead of schedule because the surrounding area had developed much faster than projected, the \$79.4 million interchange would add eight ramps to directly link the SRT and the DNT in all directions.

In Tarrant County, NTTA began work on the northernmost portion of the Southwest Parkway/Chisholm Trail Parkway project. This section required complex feats of engineering and construction, as the road had to span the sprawling Union Pacific Railroad Davidson Yard without disrupting its vital hump lead, where more than 1,000 rail cars a day were sorted and assembled into outbound trains.

Operationally, NTTA completed the transition to a cashless toll system in 2010 with the conversion of the remaining sections of the Dallas North Tollway (DNT), the Addison Airport Toll Tunnel and the Mountain Creek Lake Bridge, accomplished by replacing tollbooths and barricades with overhead gantries and equipment that could read TollTags and license plates at full speed.

Reflecting on the conversion, NTTA Board Chairman, Ken Barr, said, “One of the things that impressed me about NTTA was that the Authority had always been a cutting-edge organization, innovative, willing to try new technology, and then develop it to benefit its customers and the community. The bottom line is that we save our customers a lot of money by collecting electronically. It’s better for us than having to keep cash secure and haul all of those quarters and dollars to the bank. It takes a whole lot less personnel. It means that motorists don’t have to stop, wait, and re-accelerate, so their trip goes faster and they get better gas mileage. And there are clean air aspects that are good for the region. I think we used the technology and changed the rules, and the results are good for everyone.”

ETC also improved safety on NTTA roadways. On the PGBT, the average vehicle crash rate was reduced by 3.6% during the two years after ETC conversion despite a 7.7% increase in traffic. On the DNT during the first year after conversion, the average vehicle crash rate was reduced 0.2% at the same time traffic that grew by 10.7%.

The elimination of tollbooths also presented challenges. Approximately 300 employees in NTTA’s toll collection department would be displaced. When the decision was made in 2007 to switch to cashless tolling, NTTA launched a program to help toll-collection and vault employees fill other positions within the agency. Kiven Williams, NTTA Director of Toll Collection and later Director of Customer and Support Services, explained, “To let our employees know about the switch in toll collection and the elimination of those jobs, we had town hall meetings. We went to every toll plaza. We talked to every employee before they read anything about it. We

made a plan to work closely with HR to retain employees by transitioning them to new jobs.”

Toll Collection Department Managers and the Human Resources Department formed a transition team that identified existing job opportunities and possible new positions within NTTA, then helped employees gain the skill sets to fill those positions. “We developed an online training program with the curriculum based on the needs of the authority, and we put a computer in every toll plaza office,” Williams added. “We offered ESL (English as a second language) courses because we had 23 countries represented among our toll workers.”

NTTA’s transition plan provided displaced employees with additional job training, professional development, typing instruction and interviewing skills. Intra-agency job fairs, job shadowing, and mentoring programs were held to further assist them. “We didn’t make any guarantees, but we did what we could to provide skills that would benefit them within the agency or if they looked for employment elsewhere, “ Williams noted.

During the three-year transition period, NTTA retrained and retained more than 200 employees who had previously held toll collection jobs. 31 of the 33 employees on the new Roadway Customer Service team, for example, were former toll collection personnel. Other employees received assistance in seeking employment elsewhere. By the end of 2010, 119 toll collection jobs at NTTA had been phased out.

Efforts to enhance employees’ careers did not end with the toll collection transition. During 2010, NTTA launched several initiatives aimed at improving employee job skills and engagement. The human resources department started NTTA-U, an online portal where employees could take advantage of training and professional development programs. Three employee committees were also formed to enable input and dialog on matters of employee engagement, benefits, wellness and diversity.

Since NTTA established its business diversity department in 2008, the agency had spent increasing percentages of its contracting and procurement budget with disadvantaged, minority or women-owned, and small business enterprises (D/M/W/SBE). In 2010, NTTA approved a new diversity policy that outlined specific programs and goals aimed at increasing the participation of D/M/W/SBE in all NTTA contracting opportunities. Also toward this end, the agency continued its Monthly Business Chat Sessions and held quarterly Vendor Outreach Symposiums

in each of NTTA's four member counties to provide opportunities for vendors and potential vendors to learn more about working with NTTA.

To help establish goals in specific areas, the Business Diversity Department tracked diversity participation and outcomes. The construction services goal of 13%, for example, was achieved, while participation in the professional services category reached 25%, slightly below the goal of 28%, due to planned procurements that were not at the contract award stage before the year ended.

With safety always as a top priority, NTTA's Safe-T Buzz program was expanded to provide motorists with tips on topics such as preparing vehicles and drivers for safe summer and winter operation, proper installation and use of child safety seats, and safety considerations in holiday driving. In an expression of NTTA's commitment to educating motorists about the dangers of texting while driving, NTTA served as the corporate sponsor of the North Central Texas Trauma Regional Advisory Council's "iPromise not 2 txt & drive" campaign.

As part of its continual focus on the prevention of drunk driving, NTTA partnered with the City of Garland to present a "Teens in the Driver Seat" program in March at Firewheel Town Center. At this event, NTTA staff demonstrated special goggles that simulated the dangerous effects of drunk driving. NTTA also continued its long-standing support of Mothers Against Drunk Driving by participating in the Dallas Walk Like MADD fund-raising event and other MADD educational campaigns.

In July of 2010, NTTA Board of Directors inaugurated a new Drive to Excellence Award. In presenting the award, NTTA Board Chairman, Paul Wageman, stated, "This award is our avenue to honor and distinguish individuals or organizations that are transportation advocates, who have contributed to the ongoing success of toll road transportation, and who demonstrate a commitment to meeting the transportation challenges of North Texas." Five individuals were selected to receive the award: State Senator John Carona, Lee F. Jackson, David M. Laney, State Senator Florence Shapiro and Jere W. Thompson, Jr.

State Senator John Carona served as chairman of the Texas Senate Transportation and Homeland Security Committee from 2006 until 2010, addressing North Texas transportation issues and playing a pivotal role in promoting new transportation legislation. Senator Carona was recognized for "encouraging leaders at all levels to work collaboratively to ensure that

transportation initiatives in North Texas and across the State are coordinated to benefit all the citizens of Texas.”

Lee F. Jackson was recognized for more than 25 years’ service to North Texas as a member of the Texas House of Representatives, as a Dallas County Judge, and as the chancellor of the University of North Texas System. Jackson’s efforts and advocacy led to the creation of NTTA and he worked tirelessly to advance NTTA projects and champion the regional toll authority model. He was known for formulating and promoting collaborative regional solutions.

David M. Laney served as a Commissioner and Chairman of the Texas Transportation Commission and a member of the Board of Directors of the Texas Turnpike Authority (NTTA’s predecessor). Laney played a pivotal role in the development and improvement of projects such as North Central Expressway, the I-30/I-35 canyon mix-master, Southwest Parkway, LBJ Freeway, the Woodall Rodgers Freeway extension and State Highway 121. Throughout his tenure, he championed the increase of funding for transportation.

State Senator Florence Shapiro sponsored and co-sponsored the bills that created NTTA and improved its operations. She was known as a strong supporter of NTTA projects including the Dallas North Tollway and the President George Bush Turnpike Western Extension. Senator Shapiro was also instrumental in the legislative process that led to NTTA being able to bid on the right to develop and operate the Sam Rayburn Tollway.

Jere W. Thompson, Jr. served on the Board of Directors of the Texas Turnpike Authority. He then led NTTA during its crucial early days, defining its mission, setting its values and driving the success of its first turnpike projects. Thompson’s leadership was also essential to the advancement and delivery of the President George Bush Turnpike and the Addison Airport Toll Tunnel. In recognition of his contributions, the Jere W. Thompson, Jr., Scholarship was founded to provide paid internships with NTTA for university students from disadvantaged backgrounds pursuing a degree in civil engineering.

A monument engraved with the names of these honorees was installed outside NTTA boardroom in Plano. Each honoree also received one of the original Dallas North Tollway “trailblazer” signs, the distinctive signs erected along feeder roads that directed motorists to the tollway.

NTTA itself was also honored in 2010, by being awarded the International Bridge, Tunnel and Turnpike Association's President's Award. To qualify for the President's Award, NTTA first had to win one of five IBTTA Toll Excellence awards presented to member toll agencies for furthering the aims of the industry through creative, innovative and positive programs. Of those five winners, NTTA was selected for the President's Award.

NTTA was honored as a "Clean Air Champion" by the North Texas Clean Air Coalition for its "multi-faceted approach to environmental stewardship that improved air quality, protected water resources and enhanced sustainability and improved aesthetics. The coalition also honored NTTA for reducing ozone production by relieving traffic congestion through the implementation of cashless toll collection.

The Texas Public Works Association also honored NTTA with two Project of the Year awards, one in the "projects over \$100 million" category for the Lewisville Lake Toll Bridge and one in the "project cost of less than \$2 million" category for the restoration of the damaged retaining wall on the PGBT at Kelly Boulevard.

Online in 2010, NTTA continued to find new ways to reach customers through social media. After establishing a Facebook presence in 2009, the Authority added Twitter alerts, YouTube videos and biweekly email newsletters for each of the five projects under construction in 2010. In addition, the website added new pages for the Business Diversity Department, Government Affairs Department, and two pages informing customers of their payment options for cashless tolling.

In project financing, operational innovation, customer safety and employee development, 2010 was a banner year for NTTA, a year that set the stage for even more impressive gains yet to come.

NTTA Chapter Eight – 2011

NTTA's Biggest Challenges Yet

On February 6 of 2011, the North Texas region was set to host their first Super Bowl. The North Texas Super Bowl XLV Host Committee had scheduled a week-long build-up of special events. More than \$600 million was expected to flow into the North Texas economy. But then, a week before game day, an ice storm hit the region that brought traffic to a standstill.

Such storms were not uncommon in Texas and warmer weather usually thawed all the ice in just a few days – but this storm was different, the worst North Texas ice storm in 30 years. Not only did the temperature stay below freezing all week, but five inches of snow fell on Thursday night and Friday, virtually paralyzing the Metroplex at the very time that thousands of visitors were expected to converge from all around the world. Hundreds of flights were canceled at DFW Airport and Love Field was temporarily closed.

NTTA knew that there would be extraordinary demands placed on their roadways during Super Bowl week, especially the Western Extension of the President George Bush Turnpike near Cowboys Stadium, but the storm multiplied those demands. Keenly aware of their responsibilities in this crisis, crews from NTTA worked around the clock to clear roads of ice and snow. Aided by the command center's ability to locate trouble spots via video cameras and roadway sensors, crews worked back-to-back 12-hour shifts spreading sand and salt and plowing snow to keep roads open. Sub-freezing temperatures made it especially difficult to clear interchanges, some with very long ramps and bridges 100 feet high.

Fortunately, the weather cleared in time for game day and attendance was the second highest in Super Bowl history. Following this horrific weather event, NTTA invested in additional equipment and training to gain the ability to treat all elevated decks every hour and the whole roadway system every two hours along 74 specific routes. NTTA Director of System and Incident Management, Eric Hemphill, noted, "We try to be ready for anything."

After the storm, NTTA began offering a limited-edition Dallas Cowboys TollTag. Emblazoned with the Cowboys logo, NTTA's first co-branded

TollTag offered true fans a new way to display their team spirit. A sponsorship and licensing agreement that included advertising in the stadium provided additional cross-promotional opportunities. The new TollTag was introduced by Cowboys legend Drew Pearson on the eve of his induction into the Dallas Cowboys Ring of Honor.

The 2011 Super Bowl ice storm presented NTTA with an unprecedented challenge – but it was not the greatest challenge NTTA would face that year. That challenge came from the halls of government.

As NTTA's network of roadways grew and its financial capabilities increased, some area leaders wanted to know more about the inner workings of such a major player in the region's mobility. In fact, Dallas County Judge Clay Jenkins and State Representative Rafael Anchia of District 103 in Dallas wrote an opinion piece that appeared in *The Dallas Morning News* on April 7, 2011, expressing concerns about the Authority's transparency and accountability, particularly regarding leadership challenges within NTTA including executive turnover and changes in general counsel. There were also questions arising from deals with legacy contractors, Board involvement in the selection of vendors and the lack of diversity on NTTA's Board of Directors. They observed that "In its 14 years of remarkable growth, NTTA has had an outside organizational assessment and routine financial audits, but there has never been a thorough outside performance review."

Accordingly, the Commissioners Courts of Dallas and Tarrant counties unanimously adopted resolutions calling for NTTA to finance and undergo an independent performance review from an outside agency to be selected by the four member counties. "These resolutions," Jenkins and Anchia expounded, "included a review of procurement guidelines and processes, involvement in minority- and women-owned business enterprise, administrative fees and alternatives, funding alternatives in times of cash-flow shortages, transparency, organizational structure, diversity representation on the Board, a review of NTTA's financial analysis and liquidity, and the use of legacy contractors."

Representative Anchia, however, wanted more than a review supervised by county judges. He introduced legislation in the form of HB 1577, which he said "would put NTTA under Sunset Review, a process designed to assist the Legislature in eliminating policies in government agencies that lead to waste, duplication and inefficiency." In 1997, NTTA's predecessor, the Texas Turnpike Authority (TAA), was placed under Sunset Review and, as a result, TAA was absorbed by TxDot and ceased to exist.

Writing in the *McKinney Courier-Gazette* on April 26, 2011, Marthe Stinton wrote, "If the bill is passed, the Sunset Review would look into whether the organization is needed. Typically, sunset reviews are only done for state-run, state-funded organizations." In the same article, Collin County Commissioner Joe Jaynes said the county applauded the idea of a review, but felt NTTA should be held accountable to its four governing counties. "The Sunset Bill [HB 1577] would have NTTA going down the road to being held accountable by the state, but I think it would do its best job reporting to the local governments," Jaynes said.

NTTA Board Chairman Victor Vandergriff agreed, personally contacting each of the county judges to pledge his support for an independent review of NTTA. "I am very supportive of a local review, and it can do nothing but benefit us," said Vandergriff, "A local review would be faster and cheaper than having to answer to a state-mandated review in Austin."

Denton County Judge Mary Horn reinforced the local control option from a different point of view. "It (NTTA) is not a state agency; it receives no funding from the state's general revenue and Sunset Reviews are usually done to state agencies," Horn said. "The bill is contradictory of the intent of the original author of the legislation that created NTTA in the first place."

In discussions concerning the bill in the next legislative session, Judge Horn testified powerfully against it. She said she simply read the exact wording from SB 370, the legislation that originally established NTTA in 1997. In her testimony, she cited, "In the 75th legislative session Senator Armbrister and Senator Sibley filed the bill, and Senator Nelson signed on as co-author. Reading Section 366.033 General Powers and the House Research bill analysis, it appears clear to me that the original intent was for local control. 'GENERAL POWERS: Authorizes an authority, acting through its Board, without state approval, supervision, or regulation, to take certain actions and adopt certain rules for the regulation of its affairs and the conduct of its business. RESEARCH BILL ANALYSIS: NTTA would enhance local control of transportation needs in the area. Rather than have a Board composed of persons from all over the state who may not care about the transportation needs of the Metroplex, NTTA's Board would be composed of people inside and adjacent to the region who have a direct interest in how the system operated. Additionally, because four of the members would be appointed by the counties in the area, they would be more accountable to the residents of the region."

Judge Horn's testimony continued, "Placing NTTA under state review would be very destructive. Legislators who don't live in this area don't have a dog in this hunt, and they shouldn't be the ones doing the review."

As a result, the Texas House of Representatives rejected HB 1577 by a vote of 58 to 0. The responsibility for any performance review was placed in the hands of County Judges Jenkins and Horn, along with Collin County Judge Keith Self and Tarrant County Judge Glen Whitley. As the judges had resolved, NTTA commissioned Alvarez & Marsal, a global consulting firm with recognized expertise in transportation, infrastructure and the public sector, to conduct a review of the authority's governance, policies, and operations.

The consultants presented their findings to the county judges and NTTA's Board of Directors in a public meeting on October 18, 2011. The review verified that NTTA was fulfilling its mission of building quality roads, caring for its customers and remaining financially strong. The consultants did, however, identify concerns in the areas of transparency, procurement, organization and finance, and made 82 specific recommendations for improvements.

"NTTA adopted every single one of the recommendations," Judge Jenkins recalled, "and then came up with some ideas of their own to strengthen and build on those recommendations." Special Board meetings were scheduled to review NTTA's progress at regular intervals. By the first meeting, 90 days after the plan was put in place, 55% of the recommendations had been implemented.

The progress NTTA made was so significant that in December of 2011 NTTA was awarded the Texas Comptroller's Gold Circle Award, the State of Texas' highest financial transparency honor, for online public access to their financial documents. In 2012 and 2013, NTTA won the award for a second and third time. In 2014, the Comptroller's office created the Platinum Award, a new award with more stringent criteria. NTTA met those criteria with 22 of a possible 22 points and accepted the Comptroller's award for a fourth consecutive year.

By June of 2012, NTTA had implemented 75% of the action plan's recommendations and, by April of 2013, every item on the plan had been addressed. Even the man who had called for the Sunset Review in the first place was impressed. "Representative Anchia has told me he feels that NTTA is on the right track," Judge Jenkins commented, "and he is very happy with their work the last two or three years."

Other legislation that affected NTTA in 2011 was not so dramatic.

State Senator Jane Nelson of Flower Mound, whose District 12 encompasses parts of Denton and Tarrant counties, introduced SB 469 to simplify NTTA's billing process, reduce administrative fees, and clarify the statements received by customers.

"It's no secret we had growing pains with our ZipCash billing," said John Bannerman, Director of Customer Service for NTTA. "We sent a bill to a customer when they reached a certain number of transactions, and they had 30 days to pay it. If they didn't pay, we sent another bill, due in 15 days, for the cash-rate tolls with a \$2.50 administrative fee added to each transaction to cover the added expense of our collection process. If they persisted in non-payment, they were classified as a regular violator. Once we had to get attorneys involved in trying to collect, the administrative fees could get as high as \$25.00 per violation. Then there was the timing. The same customer might get their second invoice for past-due tolls, and then another invoice for a new batch of transactions. They could get confused about why they had several invoices, and what to pay when."

Senator Nelson explained, "Working with NTTA Board and its staff, we were able to modernize toll collections, bring about consistency in fines, and focus the heaviest penalties for true scofflaws . . ."

NTTA Board Chairman Ken Barr noted, "SB 469 changed our billing process. All we want in the first place is to collect the tolls. We don't want to be trying to collect fees and charges, but we need to collect the tolls."

The legislation specified that customers would be billed on a monthly basis rather than on their number of transactions and would have more time to pay before administrative fees were added.

Bannerman continued, "SB 469 also mandated a three-month grace period for ZipCash customers to pay up with all administrative fees waived. Of course, everyone waited until the last day. We had lines around the building. It was a Friday in August, and people were standing in 100-degree heat. Everyone here pitched in to help. Maintenance handed out bottled water to all the folks waiting in line. We kept the office open until midnight, the call center until 2:00 A.M. We finally decided to extend the deadline a week."

Barr added, “We had thousands of people that came in, we collected millions of dollars, and people got rid of obligations that frankly some of them could never have paid.”

NTTA staff also participated in a Regional Managed Lane Working Group led by the North Central Texas Council of Governments (NCTCOG) to coordinate the efforts of all the parties involved in the development of managed lanes in the North Texas region. Projects in development or under construction included TEXpress Lanes such as the LBJ Express (on IH 635), the North Tarrant Express (on IH 820, SH 183, and SH 121), the DFW Connector (on SH 121 and SH 114), and other major Dallas-Fort Worth corridors. The working group also included representatives from TxDOT and Dallas Area Rapid Transit (DART). To help create the most effective system possible, NTTA staff from the Project Delivery, Information Technology, and Communications and Marketing Departments provided expertise in tolling technology, design, and customer communications.

NTTA staff members also served on the Senate Bill 1420 Committee, a committee required by the bill, made up of local stakeholders tasked with identifying the best funding and delivery mechanisms for planned tolling facilities, specifically the IH 35E managed lane project. The committee included representatives from NCTCOG, TxDOT, and NTTA along with representatives from the cities of Denton, Lewisville, and Carrollton as well as Dallas and Denton counties. The section of IH 35E that included the managed lane project was funded from the \$3.2 billion NTTA had contributed to the region for other infrastructure projects.

Outside the halls of government, NTTA’s mission proceeded at full speed.

In Tarrant County, NTTA formed Business Information Groups (BIGs) along the Chisholm Trail corridor to promote dialog with businesses and keep them informed of construction schedules and other pertinent issues.

On the Sam Rayburn Tollway (SRT), NTTA opened two major interchanges: one with US 75 in March, and one with the Dallas North Tollway in November. Using innovative design enhancements and advanced construction methods to compress the construction schedule, NTTA completed the US 75 interchange in only 2-1/2 years. When it opened to traffic, the entire 26-mile SRT was officially completed.

The PGBT Eastern Extension was completed in December. The new section of roadway reached from SH 78 in Garland through Sachse and

Rowlett, across Lake Ray Hubbard, to the interchange with IH 30. When construction on IH 635 impeded the flow of traffic, the Eastern Extension provided motorists with an effective alternate route.

Reflecting on NTTA's rapid and impressive growth, Chairman Victor Vandergriff observed, "In an era in which the state had far too many needs for the financial resources it had, NTTA evolved from a supplemental provider of infrastructure in the Metroplex into the primary provider of new capacity for the region's roads. The region started to rely on tollroads as the primary method of delivering new capacity versus the secondary method."

As the region's "primary provider of new capacity," meeting the challenges of the Super Bowl ice storm, the Sunset threat, ZipCash growing pains and a full construction schedule gave NTTA a strenuous workout in 2011 – and they were ready for a change of pace.

NTTA

Chapter Nine – 2012

Back to Basics: Operations, Infrastructure, Finance

Following the rigorous performance review NTTA underwent in 2011 and the comprehensive action plan that came out of it, NTTA directors and executive staff developed a revised mission statement for the Authority: “NTTA’s mission is to provide a safe and reliable toll road system, increase value and mobility options for our customers, operate the Authority in a businesslike manner, protect our bondholders and partner to meet our region’s growing need for transportation infrastructure.”

Along with a new mission statement, NTTA also updated their five-year strategic plan and implemented a new organizational structure: “Coming into 2012, we wanted to focus on our commitment to three basic principles—taking care of customers, completing construction projects and improving collections,” said Ken Barr, Chairman of NTTA’s Board.

The new organizational structure aligned the three key functional areas of infrastructure, operations, and finance under the supervision of the Deputy Executive Director/Chief Operating Officer:

- The Infrastructure Group included the Project Delivery, Maintenance, and System and Incident Management Departments.
- The Operations Group was made up of the Customer Service, Information Technology and Human Resources Departments.
- The Finance Group included the departments of Controller, Cash and Debt Management, Procurement and Business Diversity.

To develop and evaluate new solutions, processes, and ventures on a cross-departmental basis, a new Strategic and Innovative Solutions group reporting directly to the Executive Director/Chief Operating Officer was also established.

As part of these new organizational initiatives, NTTA expanded their ethics policy to include provisions from the Model Ethics Act drafted by the Texas

Attorney General's office. The new policy defined the fiduciary standards applicable to directors, summarized what constitutes a conflict of interest, provided a process for resolving conflict of interest issues and instituted reporting and ethics training for Board members.

In their request for a third-party performance review of NTTA, the four county judges placed special emphasis on the transparency of the agency's finances. NTTA's success in meeting this concern was recognized by the Government Finance Officer Association of the United States and Canada. Citing "a constructive spirit of full disclosure to clearly communicate its financial story," the Association awarded NTTA a Certificate of Achievement for Excellence in Financial Reporting for their comprehensive 2011 annual financial reports for both NTTA System and the Special Projects System.

The area of the judges' biggest concern, and the primary reason the threat of Sunset Review was raised, was that of procurement, particularly the use of legacy contractors and a perceived lack of competition. Dallas County Judge Clay Jenkins recalled, "With the public and the media, NTTA got somewhat of a bad rap for that a few years ago, but that is also true in every municipal and county government. There's a natural inclination for people to utilize third-party contractors that they have experienced and are comfortable with, and it trickles down. So there's that same inclination for those third-party contractors to use the companies they've had experience with and they're comfortable with, and that has the effect of shutting out competition."

NTTA's largest post-review procurement awarded 13 professional service contracts for the Chisholm Trail Parkway. The Authority was so diligent in applying action-plan recommendations to those procurements that the American Council of Engineering Companies and the National Society of Professional Engineers awarded NTTA's Project Delivery Department their Qualifications-Based Selection Merit Award. NTTA earned the award for the "clear, well-documented, and consistent procedures used" to procure the Chisholm Trail contracts, all of which were "executed with no disputes while maximizing the potential for participation by multiple firms."

To ensure fairness, integrity and accountability in their procurement process, NTTA developed a comprehensive procurement plan to promote competition among potential contractors and secure the best value for NTTA and its customers. To maintain NTTA's commitment to business diversity, the plan included diversity participation requirements in all

contracts. “We wanted to be sure our contracting is reflective of the community we serve,” Barr explained.

For all their business diversity achievements, NTTA was honored by the Women’s Business Council-Southwest as one of eight outstanding organizations that supported woman-owned businesses through advocacy, volunteerism, and sponsorship. The Authority was also nominated for the Council’s Corporate Rising Star Award for its strides in contracting woman-owned businesses.

NTTA also entered into a partnership with TxDOT and various contractors’ associations to increase diversity in the highway construction industry. Toward that end, NTTA created a Cooperative Inclusion Plan (CIP) to establish firm benchmarks, address challenges and create opportunities for diverse firms in highway contracting. The CIP brought key highway organizations and contractor associations together to pursue four main goals:

- Expand the pool of qualified disadvantaged, minority-owned, woman-owned and small business enterprises (D/M/W/SBEs) along with historically underutilized businesses (HUBs) that were certified to perform highway construction;
- Increase spending with local D/M/W/SBEs and HUBs in highway construction;
- Grow the bonding capacity of those firms; and
- Increase the number of D/M/W/SBEs and HUBs capable of serving in prime contractor roles.

Following the new procurement policies and diversity guidelines, NTTA awarded new contracts to six major consultants to enhance NTTA’s planning process, resource allocation and operational efficiency:

- Two financial consulting firms were hired, one to provide public-private partnership advisory services and the other to advise NTTA on general and municipal financial matters.
- A maintenance management consultant was hired to provide professional planning, condition assessment, project design, project management, asset management and lifecycle cost analysis for NTTA’s hard assets.

- Two traffic and revenue consultants were contracted to provide investment grade reports, support bond issuances, assist budget development and give advice and counsel on traffic and revenue.
- A contract was also awarded to a general engineering consultant to be responsible for asset inspections, bond sales reviews and certifications, construction fund payments, progress reports and independent reviews and certifications following completion of construction.

Out on the roads, tollway construction advanced at a healthy pace in 2012.

In October, the main lanes of the President George Bush Turnpike (PGBT) Western Extension were opened to traffic. The extension stretched 12 miles, from North Carrier Parkway to IH 20 in Grand Prairie, and included direct ramps connecting with IH 30 and IH 20. Providing convenient accessibility to Arlington and Grand Prairie entertainment attractions, sports facilities, major businesses and employment centers, the roadway was immediately important to the local economy.

On the Chisholm Trail Parkway (CTP), NTTA began construction on all the remaining sections of the roadway southward to the city of Cleburne, including five bridges spanning the huge and bustling Union Pacific Railroad Davidson Yard. To meet the challenge of building the bridges with minimal disruption of the railroad's switching yard (required by an agreement among NTTA, the City of Fort Worth and Union Pacific) NTTA crews worked 24/7 to complete the work as quickly as possible.

Although the completion of the CTP wasn't scheduled until early 2014, NTTA began reaching out to residents and businesses along the corridor in late 2012 through an advertising campaign, speakers from NTTA's speakers bureau and Business Information Group (B.I.G.) meetings to ensure the public was aware of the timetable, impact, and benefits of the CTP project.

Also in 2012, NTTA's Board of Directors passed a resolution affirming its intention for NTTA to pursue SH 360 as a turnpike project. SH 360 was a proposed 21-mile toll road extending from south of IH 20 in Grand Prairie to US 287 through Tarrant, Ellis, and Johnson counties. The initial sections of the road would be built by TxDOT, then NTTA would partner with TxDOT and the North Central Texas Council of Governments to deliver SH 360 South, the final 9.7-mile section to US 287.

Other corridors NTTA was considering pursuing as toll road projects were SH 170, a 5.8-mile toll road from IH 35W in southwest Denton County to SH 114 in northern Tarrant County, and the East Branch/SH 190 project that would extend the eastern side of the PGBT 11 miles southward from IH 30 in Dallas County to IH 20 in Kaufman County.

To make these new roadways, along with all other NTTA roadways, ever safer in 2012, NTTA applied some highly innovative solutions.

“Safety is our number one concern,” said NTTA Board Chairman Ken Barr. “We do a good job, and our roads are safer than most, but I think we can still make progress and make the roads even safer for our customers and our employees.”

Early in the year, NTTA created an Employee Safety Committee in an effort to achieve and sustain a fully rounded safety culture. “We do the straightforward things, like making sure we’re using best practices in our procedures,” explained Eric Hemphill, NTTA’s Director of System and Incident Management. “But we do more than that. We analyze and evaluate incidents and accidents to find the root cause, and determine how to prevent them from happening again. For example, if you were injured using a certain piece of equipment, but we never trained you in the proper way to use that equipment, the accident wasn’t your fault.”

In addition to training and ongoing safety programs, NTTA has been at the forefront of creating safer work environments. “We were the second agency in the world, and the first in Texas, to own a mobile barrier trailer. It provides positive protection for the employees, and it also allows us to reduce the number of lanes we’re closing for routine work,” said Hemphill. “Before, to do work in the right lane, we had to close two lanes to create a safety buffer zone for the employees. The mobile barrier is so effective that we can close only the lane we’re working in,” Hemphill asserted.

The barrier system is one lane wide. It consists of a smooth steel beam with an impact cushion on the end facing oncoming traffic. The barrier is towed into place and takes less than ten minutes to set up, minimizing the amount of time workers spend on the road and the time traffic is impeded. Federally required crash tests showed that the barrier can redirect and absorb the impact of a 2.5-ton vehicle, such as a passenger car or a pickup truck, traveling more than 60 miles per hour.

Some roadwork, however, requires more than the mobile barrier to create a safe work zone. Traffic cones, barrels, and temporary signs are still needed for larger areas. Hemphill explained, "Setting up a lane closure is one of the most dangerous times, when we are actually trying to set the cones or barrels up and get traffic to start moving over. Once we've got the markers set up, there's a positive safety zone established to keep the traffic and our workers away from each other.

We started looking for a truck that could set up an entire lane closure. There are lots of cone placement trucks on the market. There are a few that can set up barrels. But there wasn't anything that allowed us to do cones, barrels, signs, all the stuff you need to put up. So we developed and built our own."

To realize the goal of an all-in-one safety truck, NTTA maintenance department designed and built a truck-mounted system that could not only set out temporary signs, cones and barrels, it could pick them up when it was time to re-open the lane. Now employees could stay safely enclosed in the truck during activities that previously required exposure to high-speed traffic. "We called the worker safety program 'positive protection for boots on the ground.' We don't want a boot on the ground without something protecting it from the traveling public," Hemphill concluded. NTTA applied for a U.S. patent on this new roadway safety system and a patent was granted in 2015.

Having made ZipCash invoices less confusing, administrative fees lower and law-abiding customers happier in 2011, NTTA cracked down in 2012 by going after habitual violators who refused to pay their bills. Targeted at motorists who regularly drove on the toll roads, had 100 or more unpaid tolls and had ignored at least 16 notices requesting payment, NTTA's "Pay Your Bill" initiative put them on notice. The campaign used billboards, radio commercials and online messages to make it clear that motorists must pay past due ZipCash bills or risk going to court and receiving more fines. NTTA also got personal, adding a page to its website with a list of the names of Top Toll Violators, the amounts they owed along and a notice of impending further enforcement actions.

At the same time, NTTA was sending messages of appreciation to the more than 90% of TollTag users or who paid their ZipCash bills on time. A strong majority of those customers applauded NTTA's efforts to ensure that every motorist who drove on the toll roads paid their fair share of the costs to build, maintain, and repair the smooth, safe, and convenient roads they all enjoyed.

To collect tolls due from out-of-state drivers, who made up 1.7% of all transactions on NTTA roads, the Authority entered into an agreement with the Louisiana Department of Transportation and Development to share driver's license information on drivers who used each other's toll roads. Even in states where no formal agreement was in place, NTTA began pursuing dead-beat drivers by partnering with a third party provider to acquire vehicle information that enabled NTTA to issue ZipCash invoices. The agency also made Zip-Pass accounts available to visitors.

The success of NTT's "back to basics" focus in 2012 is evidenced by the 90% customer satisfaction rating they earned on their biennial customer survey. The survey also revealed that 79% of those customers who contacted the customer service center with an issue reported first-contact resolution – and customers gave the Authority especially high marks for convenient payment options and the cleanliness and general condition of its roads.

"We do a lot of surveying of our customers, and we've consistently been above 90% satisfaction level..." NTTA's Director of Customer Service, John Bannerman, said. "I understand that they may not like the idea of paying a toll, but I want to make sure we provide the best customer service experience they can have. I don't expect people to compare us to a trip to the DMV. They're going to view us in light of their other experiences during the day. 'I went to Starbucks, I went to a drive-through for lunch, I went to NTTA, and I went to my bank. And really, the best customer service experience I had was at NTTA.' That's our goal."

NTTA

Chapter Ten – 2013

Customers, Construction, Collaboration, Collections

In 2013, NTTA's 2012 emphasis on operations, infrastructure and finance evolved into a new set of priorities referred to as "the 4 C's"—customers, construction, collaboration and collections.

CUSTOMERS:

In response to results of NTTA's 2012 customer survey, NTTA sought and found ways to enhance customer service across the board. As NTTA's Director of Customer Service, John Bannerman, put it, "We received excellent reviews in our customer survey, but we identified opportunities to further improve our customers' experience."

For example, NTTA found that almost half of all ZipCash drivers, who described themselves as infrequent users and had no TollTags, were paying a 50% higher toll rate than TollTag customers. "They understood that they were paying higher tolls, but they felt like the \$40 to set up a TollTag account was too expensive," Bannerman explained. "So we introduced a \$20 Starter TollTag that offered all the benefits of the standard TollTag. It was especially well received by millennials who might only use a tollway occasionally to go to a sports or entertainment event." Following an October launch, more than 17,000 Starter TollTags had been issued by year-end.

To further enhance customer service in 2013, NTTA developed a mobile app called Tollmate. Designed for both Apple and Android devices, the free app provided real-time traffic maps, one-click roadside assistance services and account management tools. Following an April launch, Tollmate was downloaded by more than 105,000 drivers by the end of the year. In recognition of Tollmate's time-saving functionality, the *Dallas Observer* named NTTA's Tollmate as one of the top 10 mobile apps for Dallasites in 2014.

"Our customer contacts have grown by leaps and bounds across every channel," Bannerman added. "The biggest growth came from our website. In 2013, we had more than 5.5 million web visits. That's more than twice what we had in 2010, and a 24% increase over 2012." The call center was the second busiest channel. In 2013, NTTA tripled their number of

telephone circuits to reduce on-hold times and speed up customer service. Social media continued to grow as a way to engage the public as well. The number of NTTA Twitter followers more than tripled and monthly views of NTTA videos on YouTube increased by 34%.

In October, NTTA introduced a new safety blog, featuring:

- Expert safety tips for driving in extreme weather,
- Car maintenance items such as how to check tires for tread wear and proper inflation,
- Spotting impaired drivers and
- Updates on new NTTA initiatives and community programs.

NTTA also made it increasingly easy to get a TollTag, pay ZipCash bills and access customer support in 2013. To coincide with the completion of the PGBT Western Extension, NTTA added a new TollTag Store and customer service center in Irving. Prior to the opening of the Chisholm Trail Parkway, a full-service TollTag kiosk was opened at Hulen Mall in Fort Worth.

NTTA also continued to expand its Regional TollTag Partner program with local municipalities and retail locations in 2013, adding TollTag stores throughout the Metroplex. When eight Fort Worth car dealerships and 22 Fiesta Marts became TollTag partners, the total number of locations climbed to 289. With additional outlets throughout the region, NTTA issued approximately 13,000 TollTags each week in 2013, a 10 percent increase over 2012 and the highest weekly distribution in the authority's history.

CONSTRUCTION:

NTTA's most notable construction accomplishment in 2013 was the steady progress made on the entire 27.6-mile length of the Chisholm Trail Parkway (CTP), scheduled for completion in May of 2014. Although construction actually began in April 2010, the CTP had been in the works for more than 50 years. People in the area had long anticipated the congestion-relieving access into downtown Fort Worth the Parkway would bring. When the decision was made to continue that project all the way to Cleburne, its benefits to the entire region were immediately evident.

Ken Barr, NTTA Chairman of the Board, recalled, "The attitude in Cleburne and Johnson County . . . they were absolutely ecstatic about the Chisholm Trail Parkway. They were doing planning down there in Cleburne, Burleson, and Joshua, communities that were small but getting ready to grow at a phenomenal rate. They really worked together, and we worked with them every way that we can because that's good business for the toll

road. It also helps them do thoughtful land use planning so that we don't end up with problems regarding noise or access. . . They were beyond excited. I talked to the mayor down there pretty often, and they had people coming into Cleburne buying up old buildings to renovate. They're projecting their population will double in the next decade.”

In preparation for the opening of what would be the first toll road in Tarrant and Johnson counties, NTTA launched an extensive communications program to introduce the Authority to the western part of the Metroplex. Newspaper ads, billboards, manned kiosks, event sponsorship signage and a series of newspaper articles were used to prepare the public for the coming of a region-changing event.

To create a single source where local business leaders could get a comprehensive overview of the Parkway, NTTA, TxDOT, and the City of Fort Worth worked together to provide detailed updates of construction schedules and notices of temporary lane closures to help businesses and their customers keep commerce moving.

Meanwhile on the President George Bush Turnpike (PGBT), a major milestone was celebrated on March 1, 2013, when NTTA held a special event in Grand Prairie to commemorate the completion of the entire PGBT. After decades of planning, the outer loop around Dallas was finally a reality. The PGBT stretched 52 miles, from IH 30 in Garland on the east to IH 20 in Grand Prairie on the west -- a six-lane, limited-access super highway that provided convenient access US 75, the Dallas North Tollway (DNT), IH 35E, IH 635, and Dallas/Fort Worth International Airport.

As part of the celebration, dignitaries including Federal Highway Administration Administrator Victor Mendez, Texas State Representative Roberto Alonzo and Dallas County Judge Clay Jenkins gathered at the western terminus of the road and Texas Congresswoman Eddie Bernice Johnson made a keynote address via video.

To finance construction in 2013, NTTA's Five-Year Capital Plan included strategies for expanding its current system, increasing capacity and improving traffic flow. Planned projects included:

- Improvements to the DNT including a fourth lane;
- Bridge and pavement improvements system-wide and
- Widening the SRT to allow a fourth lane.

In other regional projects, NTTA's partnership with TxDOT and the Regional Transportation Council continued to advance the SH 360 project

in southern Tarrant County. The goal of this project was to shorten commute times and spur the economic development in the region.

Toll rates for NTTA's roadways are determined by the North Central Texas Council of Governments' Regional Transportation Council. TEXpress lanes are owned by TxDOT and NTTA provides tolling technology and back-office services that provide one invoice for travel on all area toll roads.

In conjunction with TxDOT, NTTA initiated new tolling service agreements (TSAs) on highways with managed (tolled) lanes in 2013. The first to be implemented was the TSA for LBJ TEXpress lanes. With collaboration among TxDOT, NTTA, and Cintra (a private sector infrastructure provider), the first phase of the LBJ TEXpress lanes successfully opened to traffic in December 2013. Motorists were informed about TEXpress lanes through joint marketing campaigns, newsletters and inserts in TollTag and ZipCash statements.

COLLABORATION:

NTTA's collaborative efforts in 2013 focused on collaboration with advocates of diversity and environmental responsibility.

In keeping with 2012 objectives, NTTA made steady progress in diversifying its governance, staff and procurement. Chairman Ken Barr noted, "Our NTTA Board of Directors is the best board I've ever served on. It's made up of two people from each of the four counties and the ninth member appointed by the governor. There's broad diversity—a diversity of political perspective, of economic cares and concerns, of race issues and geography."

In compliance with the Cooperative Inclusion Plan created in collaboration with TxDOT in 2012, NTTA spent more than \$79.4 million with D/M/WBE businesses, exceeding the goals set for these projects by \$14 million and earning NTTA's Procurement Services Department an Achievement of Excellence in Procurement Award from the National Procurement Institute for the second year in a row.

NTTA's collaboration with the environment was demonstrated when NTTA showcased advanced techniques in environmental stewardship at the opening of the Frisco Maintenance Operations Center and Central Warehouse, a facility that combined practical business functionality with energy and operational efficiencies. Many of the building's elements were constructed to not only reduce energy consumption but maintenance requirements as well. The building minimized the use of electricity for

lighting through the use of windows that are specially designed and positioned to harvest natural light coupled with automated lighting controls. The facility's landscaping features native, drought-tolerant plants that used less water and a permeable paving material that allowed rainwater to drain into the ground instead of running offsite.

Located on eight acres of land near the DNT and Eldorado Parkway, the 46,000-square-foot facility allowed the Authority to centralize important resources and consolidate several smaller operations. The complex includes:

- A 19,000-square-foot warehouse;
- Onsite fueling services, including gasoline, diesel, and propane;
- A vehicle wash bay;
- Abundant storage space;
- Parking for more than 300 vehicles and
- Storage bays for sand and salt that enabled NTTA to quickly dispatch vehicles in inclement weather conditions onto the DNT and Sam Rayburn Tollways.

Environmental collaboration was a high priority in all of NTTA's operations in 2013. That was the year the Authority contracted with Green Mountain Energy, a power provider specializing in renewable energy, to ensure that at least 10 percent of its power would be wind-sourced. By choosing renewable energy over standard power sources, NTTA reduced carbon dioxide output by 7.4 million pounds over the course of the four-year contract, the equivalent of taking 720 cars off the road for a year. NTTA's fleet featured hybrid, flex-fuel and low-sulfur diesel vehicles. And all NTTA facilities reduced waste by recycling a range of materials including compost and mulch used in landscaping, cardboard boxes, office papers, even highway signs.

COLLECTIONS:

In 2013, NTTA increased the effectiveness of its collection process by using technology, communication, education and legislation. John Bannerman said, "We always want to use the equipment we have to make it easy and efficient for customers to pay their bill, whether it's through the website, the voice recognition telephone system, or another self-service channel. Then that way we can free up our customer service representatives to handle the tougher questions."

To improve the ZipCash system, NTTA IT staff upgraded both the system's hardware and software. Auxiliary lighting and additional cameras were added at each toll gantry to improve license plate image quality. The

National Change of Address database was accessed and skip-tracing services were employed to find the most accurate billing addresses for customers,

The highest-profile change to NTTA's toll collection process was the 2013 state legislature's passage of Senate Bill (SB) 1792, which authorized new toll enforcement tools throughout Texas. Prior to the passage of SB 1792, the only leverage NTTA could exert on habitual violators was escalating administrative fees.

"The vast majority of toll road users—92%—pay for their use of our toll roads and the maintenance, repair, safety, and reliable travel that tolls let us provide," Bannerman explained. "Unfortunately, a small percentage of users don't pay their share. They continue to ignore multiple invoices with ever-increasing fees, and they even disregard summons to appear at court hearings."

SB 1792 authorized new enforcement remedies to ensure equitable payment by all users of Texas toll roads, including:

- Blocking vehicle registration until toll obligations are met;
- Banning a vehicle from toll roads, with the possibility of Class C misdemeanor charges and/or impoundment of a vehicle in violation of such a ban;
- Collaboration with the Justices of the Peace, Department of Motor Vehicles and Texas Association of Counties to implement toll enforcement remedies and
- Interlocal agreements with Dallas, Denton, and Tarrant counties to begin vehicle registration blocks.

As part of SB 1792, NTTA offered a 90-day grace period to habitual violators during which administrative fees would be waived on past-due tolls for all those who either opened a new TollTag account or resolved an outstanding account balance. "The goal was always to turn those violators into good TollTag customers," Bannerman noted. "Many times it was mostly a matter of education, explaining, 'Yes there is a mobility issue in the Metroplex, this is why these are toll roads, what the tolls go for, and without the tolls these roads couldn't be here. So you have to pay them. But we can offer you a program where you're paying a reduced rate and getting the most benefit out of it.'"

The 90-day grace period started June 14, 2013, and officially concluded at midnight on September 18, 2013. "Of course, everyone waited until the last day," Bannerman continued. "We had lines around the building. It was a

Friday in August, and people were standing in 100-degree heat. Everyone here pitched in to help. Maintenance handed out bottled water to all the folks waiting in line. We kept the office open until midnight, the call center until 2:00 A.M. We finally decided to extend the deadline a week.”

At the end of the grace period,

- More than 71,200 customers were served at the front counter,
- More than 694,900 calls were received,
- More than \$4.7 million was collected from customers with past-due tolls,
- More than \$4.38 million was obligated in 5,300 customer payment plans to settle outstanding toll bills and
- Approximately 22 percent more new TollTags were distributed compared to the same period in 2012.

NTTA chairman Ken Barr added, “When it was all said and done, we had thousands of people that came in, we collected millions of dollars, and people got rid of obligations that frankly some of them could never have paid.”

By year’s end, NTTA had excelled in all four of “the 4 C’s,” enhancing customer satisfaction, pushing construction forward, collaborating with partners and making collections more effectively.

NTTA

Chapter Eleven – 2014

\$25.5 Billion of Annual Economic Impact

On May 11, 2014, the Chisholm Trail Parkway (CTP) was opened with great fanfare. A series of celebrations themed “How the West was One” were staged featuring a herd of Texas longhorns, a ceremonial flyover and the Chisholm Trail Run/Ride that drew thousands of people for a 5K run and bicycle rides on the fresh, new pavement.

For months, NTTA had been generating community awareness and preparing motorists, residents and businesses in the area for the opening of the CTP. NTTA’s Speakers Bureau conducted more than 60 engagements, addressing hundreds of business decision makers, municipal leaders, civic clubs and other community groups.

In the communities along the corridor, NTTA created awareness by opening a new TollTag Store in Fort Worth with festivities that included appearances by former Dallas Cowboys All-Pro Drew Pearson, the TCU mascot, Super Frog, and TCU cheerleaders. As part of the event, NTTA even introduced a special TCU-themed TollTag.

To further build awareness, the Authority launched the Open Road Sweepstakes, during which customers who opened new TollTag accounts were automatically entered to win one of five “Best Texas Road Trip Ever” adventures. All packages included RV rentals, accommodations, money for meals and gas, and admission to statewide tourist attractions. TollTag account holders and ZipCash customers entered online or by mail. As a result, 190,000 new TollTag accounts were opened during the promotion.

For the actual opening ceremony of the Chisholm Trail Parkway, more than 300 elected officials, NTTA board members, distinguished guests, spectators and news media gathered at the Tarrant County-Johnson County line. Reflecting on Fort Worth’s western heritage, speakers noted the historical significance of the road and its parallels to the original Chisholm Trail, a mid-1800’s cattle trail that led from South Texas to the railhead at Abilene, Kansas. In tribute to that tradition, the customary ribbon cutting was done with a rope.

As soon as the CTP was opened to traffic, the pent-up demand for it was evident. Traffic counts, transactions and TollTag usage all exceeded projections. “For the citizens in the area, the road was long overdue,” said Victor Vandergriff, a life-long resident of Tarrant County and former Chairman of NTTA Board. “The project had been on the Fort Worth master plan since the 1960s, but it had languished for years due to a lack of funding.”

There were other factors as well that set the CTP apart from the rest of NTTA system. Barr noted, “It was the first time NTTA had built a 27-mile road in a green field situation.” South of Fort Worth, the parkway passed almost entirely through open country. That brought its own special challenges.

“The road is a different environment than what we’ve been used to,” said NTTA Director of System and Incident Management, Eric Hemphill. “Wildlife has been a challenge in that area. Feral hogs roam the area, cattle get out of fences . . . Our Roadside Safety Service employees are truly cowboys sometimes, herding the cattle off the road.” With a laugh, he added, “We’ve developed relationships with some of the farmers down there -- we see their cattle on our system and we’re able to call them to come rope them back in. But it’s been good because it’s also allowed us to have more contact with partner cities, counties, law enforcement, that we can learn from. We didn’t know some of the things we know now about dealing with rural issues. We’ve developed good relationships with local agencies and learned some things along the way.”

Motorists in Tarrant and Johnson Counties were highly enthusiastic about the CTP. “I come from the western side of the Metroplex where we have not had the history of the last 25 or so years of the Dallas North Tollway, the bridges, the tunnel,” explained Ken Barr, NTTA Board Chairman and former Mayor of Fort Worth. “It’s fascinating—I run into people all the time that are thrilled about the Chisholm Trail Parkway.”

Community leaders shared in the enthusiasm for the new road and wanted to make “their” CTP a distinctive thoroughfare. The City of Fort Worth opted to add features and elements that went beyond NTTA’s already high standards of esthetics. Vandergriff observed, “The standards of NTTA roads are higher than non-tolled roads in term of landscaping and maintenance, but they’re higher still on Chisholm Trail. There’s more green space, more curves than usual—it’s a true parkway. There are actually some art projects on it as well. The residents of Fort Worth were willing to

pay a higher toll in order to ensure that they got that. That's probably the best-looking road in NTTA network."

Other NTTA roadways, while perhaps not as breathtaking as the CTP, were nonetheless just as beneficial to other North Texas communities.

On the Dallas North Tollway and the President George Bush Turnpike, design work was completed on expansions and enhancements that would increase capacity and relieve traffic congestion. Construction was scheduled for 2015.

On the SH 360 project, NTTA's Board of Directors approved an agreement with the Regional Transportation Council and TxDOT to develop, finance and construct SH 360 as a 9.2-mile tollway south of IH 20 in Arlington into Johnson and Ellis counties. Under the terms of the agreement, TxDOT would finance and build the project while NTTA would own, operate and maintain the tollway once construction was completed.

In partnership with TxDOT and private developers, NTTA expanded billing services for area TEXpress lanes in 2014, including the North Tarrant Express and DFW Connector projects. Unlike NTTA toll roads, TEXpress lanes have toll rates that fluctuate depending upon the traffic level in the lanes and time of day, with the goal of keeping traffic moving at least 50 miles per hour. "The TEXpress lane projects have required an unprecedented level of collaboration and communication between TxDOT, the private entities and NTTA," said Elizabeth Mow, NTTA's Assistant Executive Director of Infrastructure. "We've all come together for the good of the customer."

NTTA's Director of Customer Service, John Bannerman, explained, "We have tolling service agreements (TSA) on these managed lanes. The other parties build the roads, they put in their equipment, and we provide the back office and billing services. We give the customers a single point of contact for all toll road transactions. Customers only get one monthly bill, with all their NTTA tolls and TEXpress tolls itemized, and they make one payment to us. It really cuts down on confusion. Can you imagine if someone got two, three, four bills, from each managed lane operator? We make it as convenient as possible for the drivers."

TEXpress lanes were especially important to IH 35, arguably the most vital transportation artery in the state. With its reach from Minnesota through Texas, it is the unofficial NAFTA highway, vital to commerce in three nations. The North Texas section of the highway has long needed

renovation and widening, particularly the stretch in Denton County where the road narrowed to just two lanes in each direction.

The project was delayed for years because funding was not available -- until NTTA paid the region \$3.4 billion in upfront fees for the rights to manage and operate the SH 121 tollway (the Sam Rayburn Tollway) and SH 161 (the Bush Turnpike Western Extension). The Regional Transportation Council released some of that money to fund the IH 35E expansion, including managed TEXpress lanes in the center. NTTA was slated to take over management of the lanes as soon as construction was complete. Toll revenue was to be used to offset ongoing maintenance costs for the highway.

Denton County Judge Mary Horn conducted town hall meetings and spoke with numerous constituents about the increased capacity and reduced congestion that the renovation would bring. “Everyone is looking forward to a bigger, better I-35,” Judge Horn stated. “But some people are upset about having toll lanes. The primary way that I’ve been able to overcome the pushback from those that are anti-toll on the I-35 project is to explain to them if you don’t want to pay a toll on I-35 you won’t have to. You have that choice, but if you’re driving down that additional free lane that is being constructed, you really ought to be blowing kisses to the people that are going by in the toll lane because they’re the ones that are paying for that lane that you’re traveling on. Once I get that across to people, they understand that it’s basically a self-funding project.”

Other methods NTTA employed to win over anti-toll motorists in 2014 included the development and implementation of measures designed to increase customer satisfaction. Through customer surveys and service center contacts, customers had requested a regular, predictable system for ZipCash invoices. In response, NTTA introduced monthly, consolidated billing for its pay-by-mail customers. One monthly statement showed a customer’s current tolls, payments and adjustments, along with any past-due amounts across NTTA’s five collection stages. Statements also clearly indicated whether tolls originated on NTTA roads or TEXpress lanes for the more than 125 million ZipCash transactions that NTTA processed annually

As NTTA processed ZipCash transactions, certain patterns emerged. “We determined that we had a lot of folks from out of state—especially from Oklahoma and Louisiana,” Bannerman commented. “We partnered with Marketing to see how we could reach out to those drivers and make it easier for them to use the roads and pay their bills.”

In August of 2014, NTTA partnered with the Oklahoma Turnpike Authority (OTA) to allow full interoperability between the two systems. This enabled the use of TollTags on all 10 turnpikes of the morer-than-600-mile OTA system at the same discounted rate OTA customers received. Many North Texas and Oklahoma drivers were eager to take advantage of this development. In the remainder of 2014, there were more than 20,000 OTA customer transactions on NTTA roads and over 49,000 NTTA customer transactions on OTA turnpikes. NTTA also initiated discussions on a similar agreement with the Kansas Turnpike Authority and participated in national efforts to advance the goal of achieving nationwide tolling interoperability by 2016.

2014 marked the 25th anniversary of NTTA's TollTag and saw the issuance of the three millionth TollTag. To put that number in perspective, about six million vehicles were registered in the Dallas-Fort Worth region -- so there were TollTags on nearly half of them. And TollTag use has accelerated: It took 16 years to reach one million TollTags, six more years to reach two million, and only three more years to reach three million.

The \$20 Starter TollTag also continued to gain momentum, representing more than a third of new TollTags. Following the introduction of the TCU TollTag at the opening of the Chisholm Trail Parkway, NTTA also introduced an SMU TollTag.

Since a big part of keeping customers satisfied lies in keeping them informed, the Authority continued to expand its use of technology to stay in touch with customers during 2014. Downloads of their free, award-winning Tollmate mobile app totaled 250,000 and NTTA's number of followers on Facebook and Twitter increased 62 percent and 25 percent respectively.

In another step to keep the public aware and involved with NTTA's operations, the Authority began live webcasts of its monthly board meetings. Webcast viewers could then follow in real time as NTTA's staff, stakeholders and public interacted with the Board of Directors regarding NTTA finances, projects, customer service, collections and operations. Meetings were archived online at NTTA.org for viewing at any time.

NTTA also introduced "At Your Service," an online customer appointment reservation system. "No one likes to wait in a line or spend time on hold," Bannerman sympathized. "So we developed 'At Your Service' to save our customers time. They can go to our website and schedule an appointment, sort of like the Apple Genius Bar. They can schedule either an in-person

visit or a return phone call from one of our representatives. Customers have quickly embraced it.”

Customer contacts through all channels continued to increase significantly throughout the year. Online contacts totaled 8.7 million, an average of 23,800 per day, representing an increase of 58% from 5.5 million the prior year. There were also 4.7 million contacts through the customer service center, averaging 12,923 per day and representing a 24% increase from 3.8 million in 2013.

2014 also saw the most dramatic demonstration yet of the power of NTTA roadways to generate commercial development. According to a November 7, 2014 article from the *Dallas Morning News*, “Four developments in the works along the Dallas North Tollway in Frisco between Warren Parkway and Lebanon Road now have a catchy name—The \$5 Billion Mile. The Frisco Economic Development Corporation presented the concept at a meeting this week of the North Texas Commercial Association of Realtors.”

The description referred to four major projects:

- The Star, a \$1 billion, 91-acre development that included the new Dallas Cowboys headquarters, a 12,000-seat indoor stadium and multi-use facility known as the Ford Center, a 16-story Omni hotel, a nine-story Baylor Scott & White medical center, and retail and restaurant space,
- Frisco Station, a \$1.7 billion, 242-acre development that featured more than 4 million square feet of Class A office space, 2,400 apartments, retail, restaurants, entertainment venues and medical facilities,
- Wade Park, a \$2 billion, 175-acre mixed-use development that included 4 million square feet of office space, 600,000 square feet of specialty retail, a boutique hotel, a luxury hotel, restaurants and close to 1,500 apartments, condominiums and single-family homes, and
- The Gate, a \$1 billion, 41-acre mixed-use development that featured high-end apartments, condominiums, townhomes, office buildings and a luxury hotel.

Rex Glendenning, owner of Frisco-based REX Real Estate, grew up on a cotton farm in Celina and has been a land broker in the community for years. “It is remarkable to see how fast it has occurred,” he said. “Today, the epicenter of development is in Frisco. The city really gets it, and they understand how to be cutting edge and attract big business.”

But area real estate experts knew this was just the beginning of a major building boom. Longtime real estate investor Don Godwin observed, “In my

judgment, the growth you'll see from Main Street in Frisco to 380 will far outweigh, and will come along sooner, than what we've seen from State Highway 121 to Main Street."

Dallas-based Residential Strategies Inc. tracks the region's housing market. Ted Wilson, a principal at the firm, noted, "The market continues to drive people northward up the Tollway. The prices are up in Frisco, and other markets have really mushroomed in the last few years. This is the area of North Texas where a lot of relocations are happening."

Frisco Mayor Maher Maso said, "Frisco's growth along the toll roads has been so significant. We've attracted a lot of national and international companies. And not only Frisco, but Plano. I know that as we deal with companies and ways for them to relocate to our area, one of the key components that always comes up is transportation. One of their requirements is to be able to get to the airport. Or airports, I should say. That weighs heavily in their decision of where to locate. Our proximity to DFW Airport and Love Field is not just distance, it's time. With Sam Rayburn, being able to get to DFW Airport in 25 minutes was a huge impact to corporate relocation."

"When you're adding over 2200 new single-family homes a year," Maso added, "and then you have multi-family and you have corporate [locations], DNT was a breath of fresh air in being able to move quickly and meet that demand."

Jim Riggert, associate managing director at Newmark Grubb Knight Frank, said he had seen prices of land in what had become known as the "Golden Corridor" quadruple in the past seven years.

While the \$5 Billion Mile was making headlines and fortunes, not all of the major development along the DNT took place in the Golden Corridor. In one of the largest corporate relocations ever for the Metroplex, Toyota announced that it was moving its U.S. headquarters from California to a new campus in Plano just southwest of the interchange of the DNT and the Sam Rayburn Tollway (SRT).

Toyota announced that its campus would occupy almost 100 acres of land and contain 2.1 million square feet of office space. At a total cost of more than \$1 billion, the construction phase was expected to create up to 2,000 jobs. Once complete in 2016 or early 2017, the complex would employ 4,000. To fill those positions, Toyota planned to relocate about 2,000 employees from Toyota Motor Sales U.S.A. Inc. in Torrance, California,

and 1,000 employees from Toyota Motor Engineering & Manufacturing North America Inc. in Erlanger, Kentucky, leaving approximately 1,000 new jobs to be filled locally.

In May of 2014, Toyota signed a short-term lease for 120,000 square feet of office space at The Campus at Legacy on Legacy Drive in west Plano to serve as a temporary operational hub for key Toyota North America executives and the first wave of employees.

Prior to the arrival that first wave, Toyota conducted a thorough relocation campaign that educated employees about the benefits of living in North Texas, especially compared to the traffic congestion and high cost of living in southern California. The campaign was reinforced by groups of volunteer employee “pioneers” who made the move to North Texas and then reported back to their colleagues about the area and lifestyle.

OneToyota.com, a website for Toyota employees, featured a detailed section with an array of information about Plano and North Dallas. An interactive map allowed employees to see communities and neighborhoods that were within a 10-minute and a 30-minute commute from the new headquarters. To their delight, the roads of NTTA system—the DNT, the PGBT, the SRT and the LLTB—radiated out like spokes from the new campus, enabling the widest possible choice of housing locations and commute times.

With 3,000 new Texans on the way, NTTA took an active role in preparing for them. NTTA’s Director of Customer Service, John Bannerman, explained, “Toyota has been bringing their employees in from out of state—primarily California, Ohio, and Kentucky—and every other Tuesday we go to their offices and welcome them to the area, explain who we are, show them the roads in their area, and offer them the opportunity to get a TollTag. We also hear about their experiences with other toll road systems and their expectations. With that kind of information, it’s given us better insight into our new customers and how to better respond to their needs.”

NTTA also responded to customer needs at older sites along the DNT. In May, Amazon.com signed a lease for 89,000 square feet in Two Galleria Tower at the interchange of the DNT and IH 635 for their new regional office – and they were not alone. Randy Garrett, a principal at Transwestern Commercial Services, observed, “The Dallas North Tollway north of LBJ Freeway is currently enjoying a resurgence in terms of new retail activity. The area is vastly improved by the amenities, aggressive bill rates, and high quality projects to chose from.” He went on to note that the

stretch of the tollway from IH 635 north to the PGBT had seen Class-A rental rates increase 20% to 25% in the past three years because of phenomenal demand.

The impact of all the growth NTTA was helping to bring to North Texas was measured by the Center for Economic Development and Research at the University of North Texas in 2014, when they conducted, as they had in 2006, a study to assess the economic, fiscal and developmental impacts of the North Texas Tollway Authority network. The study showed that NTTA had been an economic engine for the DFW Metroplex that fueled long-term growth, citing the following findings:

- NTTA spent almost \$7.3 billion from the mid-1960s through 2013 on system development. This investment generated \$14.4 billion in regional economic activity, supported approximately 97,000 person-years of employment and paid \$5.3 billion in salaries, wages, and benefits.
- Even along the original segment of the Dallas North Tollway where most development occurred before the road existed, significant redevelopment activity occurred within the half-mile buffer on either side. From 2007 through early 2013, more than \$1.4 billion in new construction was generated in the area.
- Property developments valued at \$6.3 billion were constructed along NTTA toll roads from 2007 to 2013, supporting as much as \$149 million in annual property tax revenue – and those figures were projected to grow exponentially with upcoming projects, such as new homes associated with major developments by State Farm.

The study also found that NTTA helped sustain the North Texas economy during the 2008-09 recession by investing more than \$4 billion in improvements to transportation systems between 2007 and 2013. This activity generated \$8 billion in regional economic activity and supported almost 55,000 person-years of employment. Total labor income was boosted by \$3 billion and property income increased by \$1 billion.

Largely because of NTTA roadways, the DFW Metroplex offers compelling business advantages and a better quality of life:

- Compared to the largest U.S. metro areas, DFW had one of the lowest levels of commuter delays. According to the Texas A&M Transportation Institute's Urban Mobility Report, the DFW population

grew by 27% during 2001-2011 yet congestion-related delays only increased about 12%. The expansion of NTTA toll roads accounted for much of the improved mobility, especially in fast-growing Collin County.

- NTTA roads attracted billions of dollars in property investments. More than \$6.3 billion in property value was added along NTTA roads from 2006 through early 2013, generating as much as \$149 million in annual property tax revenues.
- Homeowners also benefited from their proximity to NTTA toll roads. Houses located between one-quarter mile and one mile from NTTA roads were linked to a 9% price premium that boosted tax revenues for local governments and school districts. In Dallas County alone, more than \$1.0 billion of new residential housing had been constructed within one-half mile of NTTA roads since 2007.
- NTTA's recurrent operational spending created permanent jobs and economic opportunity for businesses across North Texas. NTTA generated \$285 million in annual economic activity, supporting about 1,400 direct, indirect and induced jobs that paid \$83.2 million in salaries, wages and benefits.

In fact, NTTA made contributions to regional economic growth throughout 2014:

- The Chisholm Trail Parkway represented \$1.6 billion in new infrastructure spending with a projected economic impact of more than \$3.2 billion through the completion of the project.
- Of the \$3.4 billion NTTA paid to build, operate, and maintain the SRT, more than \$1.6 billion had been spent through 2014 to support non-tolled projects in North Texas. This investment had sparked more than \$3.2 billion in regional economic activity at that point and additional growth was anticipated as the NCTCOG continued to distribute the remaining funds.
- New development began along the newest segment of the Dallas North Tollway with a new mixed-used development south of Lebanon Road and the Dallas Cowboys' future headquarters and training facilities.

- The Bush Turnpike facilitated one of the largest real estate development projects in North Texas when State Farm Insurance and Raytheon made plans to move their national headquarters to the toll road's intersection with US 75.
- Undeveloped land along other areas of the Bush Turnpike and Sam Rayburn Tollway potentially could yield additional development under appropriate market conditions.

The study concluded by stating: "Based upon our analysis, recurring operations by the businesses along NTTA network generate \$25.5 billion in annual economic activity in the DFW region and supported approximately 183,000 direct, indirect, and induced jobs that pay \$10.4 billion in salaries, wages, and benefits. The North Texas Tollway Authority network continues to provide the mobility required for the DFW region's economic success. In this update to our 2006 analysis, we find that expansion of the tollway network has supported the development of hundreds of commercial properties, and it has kept mobility in the region at a competitive level despite rapid population growth."

NTTA not only had a positive impact on the regional economy in 2014 but on the environment as well. Among their most notable accomplishments was the Maintenance Department's pilot program to recycle sand used during ice and snow events.

After a winter storm, NTTA routinely dispatched sand sweepers within 72 hours to minimize the safety hazards of sand on the roadway. Because the sweepers swept up road debris along with the sand, the sand had always been taken directly to a landfill. But under the new program, a specialized machine sifted and separated the sand from the debris, resulting in "clean" sand that was ready for use during future snow and ice events. The program saved about \$70,000 on the purchase and delivery of new sand for the upcoming winter season, decreased the carbon footprint of delivery trucks and reduced the impact on local landfills.

In Plano, a solar panel was added to the roof of NTTA's Plano Maintenance Service Center. The energy produced by the panel was monitored through a web-based system that allowed NTTA to track and verify the system's performance. The estimated annual energy production from the system was 52,500 kilowatt-hours. In its first month in operation, the system produced in excess of 6,000 kilowatt-hours. The new solar panel system saved on monthly operational expenses and, as a result of

this energy-saving measure, NTTA received a \$50,000 credit from their electric company, Oncor Electric Delivery.

In another area of achievement, NTTA's efforts to increase business diversity in its contracts continued to gain momentum. For the third year in a row, the agency's Procurement Services Department received the Achievement of Excellence in Procurement award from the National Procurement Institute.

One of the highest points of NTTA's year, every year, is the presentation of their highest honor, the Drive to Excellence Award. Established to honor individuals or organizations who are transportation advocates, who have contributed to the ongoing success of toll road transportation and who demonstrate a commitment to meeting the transportation challenges of North Texas, the 2014 Drive to Excellence Award was presented to Congresswoman Eddie Bernice Johnson and former NTTA Chairman Paul N. Wageman.

A year featuring the grand opening of a long-anticipated toll road, a \$5 Billion Mile and a \$25.5 billion impact on the local economy would be a hard year to beat – but that's exactly what NTTA did.

NTTA

Chapter Twelve – 2015

Bigger Developments, Bigger Roadways, Bigger Benefits

NTTA's impact on the North Texas economy did not end in 2014. The dramatic commercial development that occurred along NTTA roadways that year was just a prelude to the developments that came in 2015.

In mid-January, employees of State Farm Insurance began moving into the company's new regional hub in the newly developed CityLine project southeast of the intersection of the PGBT and US 75 in Richardson. Early in 2013, State Farm announced its plan to build four towers there totaling approximately 2 million square feet of office space for 8,000 employees, making it one of the largest corporate relocations in Dallas history.

State Farm spokesman Chris Pilcic told the *Dallas Business Journal* that the Richardson hub was "intentionally designed as live-work-play, where you can live on the property, go to work, and you have entertainment and dining on site." CityLine developer KDC said the \$1.5-billion, 186-acre project would eventually contain 6 million square feet of offices, almost 4,000 apartments, two hotels, a Look Cinema and 300,000 square feet of retail space for a 40,000-square-foot Whole Foods Market, restaurants and other amenities. KDC promoted the project as having convenient access to major highways, DFW airport and Love Field, complimented by an on-site terminal for DART's Red and Orange Lines. In addition to State Farm's 8,000 employees, KDC announced that Raytheon would add a facility for more than 1,500 workers.

While the Dallas area had never seen an influx of new residents to compare with the nearly 10,000 employees involved in the State Farm and Raytheon moves, the year 2015 still held an even bigger event -- the opening of the largest home furnishings store in North America.

Nebraska Furniture Mart was founded in 1937 in Omaha by Rose Blumkin. After successfully growing the business for years, she sold a majority interest to Berkshire Hathaway in a handshake deal with Nebraska mega-investor Warren Buffet in 1983. Under the new ownership, stores were added in Iowa and Kansas. In November of 2011, the furnishings giant announced its plans to expand into Texas and construction began on a 433-acre site along the Sam Rayburn Tollway (SRT) in The Colony in September of 2015.

During the groundbreaking festivities in The Colony, Denton County Judge Mary Horn heard firsthand why the firm chose to add a location in Texas. “I was having lunch with two gentlemen that were the sons of the lady that started the company,” Judge Horn recalled. “They told me that when they were looking all over the country to make the decision where to put the next store, one of the sites they were looking at was Chicago. First of all, Chicago did not have the land area that we had to offer with the connectivity that we had to offer, that being SH 121 [the SRT]. Secondly, they said everyone up there had their hand out—‘I can help you with your project, but you’ve got to grease my palm first.’ They said, ‘Then we came to Texas and it just wasn’t that way at all. Not at all!’ It really made their decision-making process easy.”

As Nebraska Furniture Mart planned the opening of their first Texas location, they also decided to become involved in real estate development, turning the land around the store into a mixed-use development called Grandscape. With a projected 10-year build-out, the master plan included 3.9 million square feet of office and retail space, approximately 300 multi-family residential units, a hotel, restaurants, an amphitheater and other entertainment.

In addition to abundant land with excellent accessibility, The Colony offered powerful incentives to the company. Long known as an almost solely residential community, The Colony depended on property taxes for its revenue. As a result, it had one of the highest property tax rates in the area. To attract Nebraska Furniture Mart and the tremendous sales tax revenue it would bring, The Colony offered to help fund construction and develop the surrounding area through the creation of a Tax Increment Reinvestment Zone (TIRZ), a commonly used economic development tool.

With a TIRZ, a city designates a zone for economic improvement then issues debt to fund upgrades to the area. After improvements are made, property tax and sales tax revenues rise. The increased revenue then goes to pay off the debt. In the case of Nebraska Furniture Mart, the sales tax generated by the store would essentially fund the store’s construction.

What was unusual about The Colony’s arrangement was its size and duration. With a TIRZ debt timeline of 40 years, The Colony was prepared to spend up to \$802 million -- more than 15 times the city’s annual budget. Greg LeRoy, executive director of Good Jobs First, a Washington-based nonprofit that studies economic development deals, told the Dallas

Morning News, “That is exceptionally big. I think it might be a world record.”

City leaders, however, saw economic value in their plan. Tod Maurina, assistant city manager for The Colony, explained, “It is a very big undertaking, and we understand that, but with the opportunity that it presented to our community, the return was more than acceptable.” The city projected that the development would generate more than \$600 million in sales tax revenue over the next 40 years. The city’s finance plan projected that the Grandscape development, which would cost \$1.5 billion, would generate \$195 billion in economic activity and create 20,426 jobs during that time.

Robert Bland, chairman of the Department of Public Administration at the University of North Texas, concurred with The Colony’s funding plan. In an interview with the Dallas Morning News, Dr. Bland said Nebraska Furniture Mart would help the city diversify its revenue and reduce the city’s dependence on residential property taxes. “This will mean lower property taxes in the long run. I think the city acted very prudently,” he said.

Judge Horn commented on a more immediate benefit. She noted, “To develop the property and actually build the roads, build the structure, build the warehouse, and then actually open the store, was something like 5,000 jobs. And those are decent-paying jobs too, for a long period of time. Also, other businesses went in around the store. So that created even more jobs. Denton County and the citizens benefited in a lot of ways from Nebraska Furniture coming in.”

The finished Nebraska Furniture Mart was on a scale that had to be experienced to be believed. The store encompassed 560,000 square feet of retail space and 1,300,000 square feet of warehouse and distribution space, making it roughly six times the size of the Ikea store in Frisco. The retailer’s Chief Strategy and Development Officer, Jeff Lind, told the *Dallas Business Journal*, “This is our largest scale store to date and we expect the store to deliver those sales.”

On May 7, 2015, huge crowds showed up for the store’s grand opening and ribbon-cutting ceremonies. On that occasion, the Colony’s Maurina cited the store’s projections when he said, “It will see 8 million visitors in the first year it opens. That is as many people as go to the Cowboys and Rangers games in Arlington combined.”

In addition to providing the major transportation artery that helped draw Nebraska Furniture Mart to the area in the first place, NTTA saw an opportunity to help the store in its operations. “When Nebraska Furniture Mart first opened, they had a huge fleet of vehicles driving in and out on the tollway, and they didn’t have any TollTags,” said John Bannerman, NTTA’s Director of Customer Service. “We got them set up and it makes it easier and saves them lots of money. Their trucks are all over the place.”

NTTA’s Executive Director and CEO, Gerry Carrigan, assessed the importance of the Authority’s roadways this way: “Without the SRT, Warren Buffet wouldn’t have put Nebraska Furniture Mart right at that location. It’s the same for Jerry Jones moving the Cowboys headquarters to Frisco and Toyota moving to Plano on the DNT, and State Farm moving their regional headquarters to Richardson on the PGBT,” he observed. “We’re in the background, but it’s safe to say that if we weren’t there, those things wouldn’t be there either.”

It was not only the scope and span of NTTA roadways that attracted economic development, it was also their condition, safety and ease of use. In 2015, NTTA initiated projects designed to increase capacity, relieve congestion, increase safety and improve access. On the DNT, the PGBT and the SRT, NTTA began construction on a fourth lane:

- On the DNT, a fourth traffic lane would be added in each direction on the section from Belt Line Road in Addison north to the SRT. Further enhancements to the road would include adding a pavement surface overlay and restriping the section from IH 635 to the PGBT. On that same stretch of road, light poles would be moved from the center median barrier to the outside shoulders to allow maintenance without shutting down traffic. At the interchange of the DNT and the PGBT, the direct-connector ramps on the north side would be reconfigured to add additional lanes. These projects were scheduled for completion in early 2018.
- The PGBT was scheduled to have a fourth lane added in each direction from Belt Line Road in Irving to SH 78 in Garland, a distance of 26 miles. Construction began in 2015 on the section of road between US 75 and the DNT, with completion scheduled for the end of 2016. The sections from SH 78 to US 75 and from the DNT to IH 35E were in the design stage in 2015, with construction to begin in late 2016 and completion scheduled for 2019. The remaining section, from IH 35E to Belt Line Road, was in the planning stage, with completion scheduled for 2021.

- For the SRT, NTTA's 2015 capital plan included the addition of a fourth lane in each direction on the entire 28-mile corridor from Business 121 in Lewisville to US 75. Environmental studies and design work were completed in 2015, construction was scheduled to begin in mid-2018, and completion scheduled for 2022.

Construction on SH 360 South, the highly anticipated road designed to connect communities in Tarrant, Ellis, and Johnson counties, began with a groundbreaking ceremony in October. The SH 360 South project involved partnerships and collaboration among NTTA and the North Central Texas Council of Governments (NCTCOG); Ellis, Johnson and Tarrant counties; and the cities of Arlington, Grand Prairie and Mansfield.

Under the partnership terms of the project, TxDOT would finance and build the 9.7-mile toll road from just south of I-20 in Arlington to U.S. 287 in northwestern Ellis County. When construction was completed in 2018, NTTA would own, operate and maintain the road.

As projects such as SH 360 South and the Chisholm Trail Parkway expanded NTTA's network of roads into areas beyond the four member counties (Dallas, Collin, Denton, and Tarrant) the Authority wanted to ensure meaningful representation, input and support from elected officials and citizens of the non-member counties. To achieve that objective, the agency created the Contiguous County Advisory Committee (CCAC).

CCAC Governor-appointed Committee Chairman, William D. Elliott, commented, "The CCAC fulfills NTTA's mission of anticipation of growth, inviting others to the table and reaching out to broader communities as NTTA expands." The Johnson County Commissioner's Court appointed R. C. "Mac" McFall to represent Johnson County and the Committee also included NTTA Chairman Kenneth Barr and NTTA Tarrant County appointee Mojoy Haddad as members. As NTTA roadways reached into other counties, those counties would also become eligible to appoint a member to the CCAC.

Of all the benefits that NTTA brought to North Texas in 2015, none was of a higher priority than getting everyone home safely. To that end, NTTA launched its Red Thumb safety campaign in May of 2015.

Implemented to help drivers remember not to text while driving, the Red Thumb movement began in 2013 in Boulder, Colorado, when Steve Babcock pledged to his nine-year-old daughter that he would stop using

his phone while driving. As a constant reminder, he painted his thumbnail red. It worked for him, so he decided to spread the message. The Red Thumb message became a national and international movement.

NTTA took the lead in North Texas by making special red rubber thumb bands with the message “W8 2 TXT” and distributing them through TollTag stores and dozens of municipal and commercial partners. NTTA promoted the Red Thumb program in multiple ways, including social media and a humorous online video that featured animated “Thumbskulls” (who persisted in distracted driving), a real Dallas police officer and firefighter, and the mythical jackalope.

During 2015, NTTA also launched a TollPerks customer rewards program for TollTag customers. “Our TollTag customers already know that they pay lower tolls,” Bannerman noted. “Many of our TollTag customers have the attitude, and we’ve kind of tried to cultivate it, that membership has its privileges. And customers stick with us. The second TollTag that we ever issued, back in 1989, is still active.”

The TollPerks program was free for all TollTag users who signed up. For each dollar spent in tolls, a customer earned 100 TollPerks points that could be redeemed for coupons and perks from area businesses. Other benefits included an online prize wheel game that could be played monthly, a quarterly sweepstakes for valuable prizes and special offers that did not require points.

After the popularity of the specialty Dallas Cowboys TollTag that was introduced in 2012 and the TCU and SMU TollTags that were launched in 2014, NTTA continued to add specialty tags in 2015. Motorists could show their support for the Dallas Stars, Dallas Mavericks, the University of Texas, Texas A&M, Baylor, Texas Tech, the University of North Texas and -- to the chagrin of some fiercely partisan Texans but nevertheless driven by high demand -- Oklahoma University and Oklahoma State. A Texas Rangers TollTag was on deck for 2106.

Through a new partnership with MoneyGram, NTTA added 1,100 new locations where customers could pay ZipCash bills or open TollTag accounts. As NTTA implemented the toll enforcement remedies authorized by the State Senate through SB 1792 in 2013, more than 20,000 habitual toll violators “came clean” and became TollTag users with accounts in good standing. Driven by the success of an array of such efforts, more than 541,000 new TollTags were activated in 2015, an increase of 17% over 2014. The \$20 Starter TollTags represented 33% of all new TollTags

distributed. And for opening new TollTag accounts, paying ZipCash bills and accessing other services, NTTA's new "At Your Service" online reservation system was used for 556% more appointments than in 2014.

As the final segment opened to the public in September of 2015, tolling policies for the entire LBJ TEXpress system were set in place. Although TEXpress lanes are owned by TxDOT, not NTTA, and use variable congestion-management pricing, the tolling policy specified that TollTag customers would always receive the lowest rates, just as they do on NTTA roads. In 2015, the biennial rate increase approved by the Regional Transportation Council raised those rates to 17.06 cents per mile.

In the Texas Legislature, two bills were passed aimed at improving NTTA's customer billing service and the security of customer information. Both bills went into effect September 1, 2015. To assure predictable monthly ZipCash billing, House Bill (HB) 2549 converted NTTA's ZipCash billing cycle to a 25-day customer payment period. It also provided customers with the option of receiving invoices by email. Senate Bill (SB) 57 enacted provisions that specifically protected the account information of TollTag and ZipCash users from public disclosure.

Operationally, the Authority's quest to improve diversity among its vendors continued to show impressive progress in 2015. 38% of the companies awarded contracts through NTTA's procurement process met the criteria of disadvantaged, minority-owned, woman-owned, and small business enterprises (D/M/W/SBEs).

Financially during 2015, NTTA refinanced more than \$2 billion in bonds, yielding \$150 million in debt service savings. As a result, both Moody's and Standard and Poor's upgraded the authority's credit rating to A1, generating a remarkable \$11.5 billion in orders for new bonds. Recognizing these accomplishments, *The Bond Buyer* once again presented NTTA the Southwest Region Deal of the Year award.

NTTA

Chapter Thirteen – 2016

Looking back at NTTA's accomplishments and contributions to the North Texas region, Executive Director, Gerry Carrigan, observed, "Since NTTA was formed in 1997, there has been a transition from the mom-and-pop, sleepy little operation that NTTA was...at that time I think we had two roads, a bridge, and a tunnel. We've grown in size and sophistication from a small company and a small player in the region to a large operation and a large player in the region, and a large driver of economic development.

Back in '97 we really just had operations in one county, Dallas. Now we have a footprint of five counties, soon to be six, with a major network of highways that are key, critical elements of the transportation infrastructure of this region.

Particularly in the last ten to fifteen years, North Texas faced some critical issues. As population continued to grow, how would we keep increasing highway capacity for the region, especially in a time when gasoline tax funding was down, the Feds weren't big players, the State didn't have a lot of money.... I view NTTA as having filled a lot of the void in terms of transportation and infrastructure development. When other funding wasn't available to build roads, the region turned to toll roads that could pay their own way.

You can measure our increasing contribution to the region's transportation solutions by looking at the agency's growth. When we started off we had \$66 million a year in toll revenue; last year we had \$600 million. Our funding as represented by bond issuance debt has gone from \$1 billion to \$9.5 billion. We had 124 lane miles back in '97; now we have almost a thousand. So our toll revenue has grown tenfold, our debt has grown tenfold, and our lanes miles have grown tenfold. We had 172,000 TollTags in distribution, now we have almost 4 million.

But more important than how far we've come is how we're positioned for the future. Every new road we build helps meet pent-up transportation demand. We have good projects in the pipeline that will increase mobility and ease congestion. Our systems are running at peak performance. We've moved beyond the effects of the recession and have continued to strengthen our financial capability to deliver projects.

The North Texas region still has major challenges in getting people where they need to go. But this is truly an exciting time to be working on solutions.”