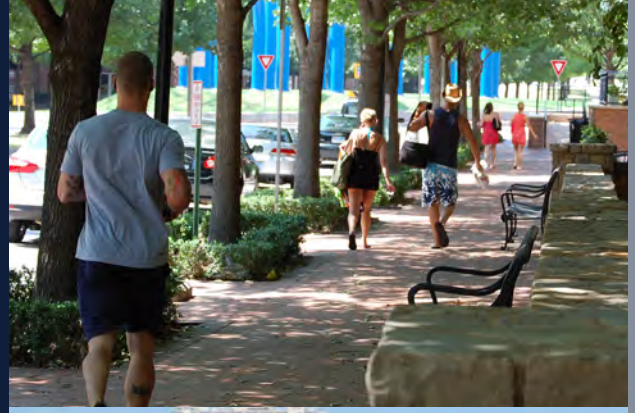


INNOVATIVE FINANCE INITIATIVE
COTTON BELT CORRIDOR

PHASE I FINAL REPORT
DECEMBER 2011

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

What is NCTCOG?

The North Central Texas Council of Governments is a voluntary association of cities, counties, school districts, and special districts that was established in January 1966 to assist local governments in **planning** for common needs, **cooperating** for mutual benefit, and **coordinating** for sound regional development.

It serves a 16-county metropolitan region centered in the two urban centers of Dallas and Fort Worth. Currently the Council has **240 members**, including 16 counties, 170 cities, 24 independent school districts, and 30 special districts. The area of the region is approximately **12,800 square miles**, which is larger than nine states, and the population of the region is over **6.5 million**, which is larger than 38 states.

NCTCOG's structure is relatively simple; each member government appoints a voting representative from the governing body. These voting representatives make up the **General Assembly** which annually elects a 15-member Executive Board. The **Executive Board** is supported by policy development, technical advisory, and study committees, as well as a professional staff of 315.

NCTCOG's offices are located in Arlington in the Centerpoint Two Building at 616 Six Flags Drive (approximately one-half mile south of the main entrance to Six Flags Over Texas).

North Central Texas Council of Governments
P. O. Box 5888
Arlington, Texas 76005-5888
(817) 640-3300

NCTCOG's Department of Transportation

Since 1974, NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation for the Dallas-Fort Worth area. NCTCOG's Department of Transportation is responsible for the regional planning process for all modes of transportation. The department provides technical support and staff assistance to the Regional Transportation Council and its technical committees, which compose the MPO policy-making structure. In addition, the department provides technical assistance to the local governments of North Central Texas in planning, coordinating and implementing transportation decisions.

Prepared in cooperation with the Dallas Area Rapid Transit, the Fort Worth Transportation Authority, the Regional Transportation Council and the NCTCOG. The contents of this report reflect the views of the authors, who are responsible for the opinions, findings and conclusions presented herein. The contents may not reflect the views or policies of the NCTCOG Board or the cooperating organizations named.

"The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation."

ACKNOWLEDGEMENTS

Prepared for

North Central Texas Council of Governments
and the **Regional Transportation Council**
www.nctcog.org/ifi

by

Partnership for Livable Communities, LLC
Project Lead
www.partnershipforlivablecommunities.com

In association with

Public Financial Management
Public Information Associates
Design Associates International, Inc.
Dickie & Associates
Katherine Gregor Communications

Special thanks to the regional stakeholders providing input, including representatives of

Cotton Belt Corridor Mayors' Offices
Cotton Belt Corridor City Managers' Offices
Collin County
Dallas County
Dallas/Fort Worth International Airport
Dallas Area Rapid Transit
Denton County Transportation Authority
Fort Worth Transportation Authority
Regional Transportation Council
Tarrant County
Texas A&M University
University of Texas at Dallas

INNOVATIVE FINANCE INITIATIVE
COTTON BELT CORRIDOR

PHASE I FINAL REPORT
DECEMBER 2011

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS

The Funding Evolution: A Platform for A More Sustainable Future

Michael Morris, P.E. *Director of Transportation, North Central Texas Council of Governments*

We live in a time and place where it is wrongly assumed transportation systems can be maintained, rehabilitated and expanded with little or no additional financial investment. We face both a financial crisis and a major misunderstanding on how to pay for transportation. This is especially true in regions like ours with high demographic growth rates, an aging infrastructure, and a goods movement sector maturing into a leading international logistics hub.

As our nation and states wrestle with various funding issues, the Dallas-Fort Worth region continues to be impatient with the lack of progress in modernizing our transportation financing and delivery of infrastructure. Inaction has not been an option. We must promote an understanding that infrastructure investment and transportation network improvements will lead to economic recovery through system improvement and domestic job creation.

As the fourth largest and fastest growing region in the United States, it is critical that we continue to invest in reliable transportation – in part to mitigate the congestion levels resulting from our million-person growth every decade since 1960. In this context, the Innovative Finance Initiative (iFi) presented in this report provides a road map for project delivery necessary for our economic survival. This initiative combines innovative revenue collection and more reliable transportation system delivery coupled with land-use sustainability.

The iFi project has been conducted to accomplish several objectives:

1. Developing a series of revenue sources that are new and significant, to fund and operate a new transportation investment — in particular, adding a central segment (the Cotton Belt passenger rail line) to our region that enhances a several-hundred-mile integrated network of reliable passenger rail transit, including direct access opportunities to DFW Airport for passengers, employees and air freight packages.
2. Putting into practice for our region often-discussed, but never executed, value capture methods: transferring a portion of the revenues from "rents" obtained from lands enhanced by accessibility improvements directly to revenues for construction and operation of the transportation improvements that create the accessibility.

… it is critical we continue to invest in reliable transportation ...

3. Investing in transportation modes that can positively impact more efficient and sustainable development patterns, therefore creating efficiencies from increased density resulting in mode shifts away from single-occupant vehicle trips. Centralized development in the core of a 6.5 million-person region will mitigate travel distances — supporting a more sustainable future for air quality, transportation investment and quality of life.
4. Expanding innovative funding as a complement to other regional innovative revenue methods already utilized for toll roads and managed lanes — thus creating an environment of continued innovation that encourages private-sector investment in the region, reduces the risks of stagnation due to dwindling state and federal resources, and increases federal "New Starts" funding competitiveness.

To date, the work in the Cotton Belt Corridor has been driven by two transportation authorities. These institutions have existed since the early 1980s. In this context, an analysis of aggregate impact of what communities pay and who benefits is critical to all funding proposals that might result from this initial analysis. In addition, the equity of revenues and costs from the eastern and western sub-regions of the D-FW region, as well as from the transportation authority "member" and "non-member" cities, is captured in this analysis. Finally,

this effort can address the challenge of communities still paying for their rail systems after almost 30 years with no realistic opportunity to obtain service for another 30 years.

This Phase 1 Report for the iFi is primarily for the region's residents, policy officials and transportation authorities. These officials are critical for the successful implementation of these findings. Beyond the Cotton Belt, this approach also could enhance other transportation investments in the region. This includes other potential passenger rail corridors, roadways and toll road facilities.

In producing this report, NCTCOG and its consultants also hope to be of service to other regions, states and federal agencies seeking to understand the opportunities and advantages of value capture and the innovative delivery of transportation. As a new form of public-private partnership, iFi deserves serious consideration.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

THE ASSIGNMENT

Phase 1 efforts for the Innovative Finance Initiative (iFi) focused on establishing the basic viability of various revenue sources to fund the Cotton Belt Corridor for passenger rail service. The assignment was to research, analyze and recommend viable revenue sources, and to draft a strategic plan for pursuing them through innovative project delivery methods. This passenger rail service will operate on the existing Cotton Belt freight line, traversing approximately 62 miles from southwestern Fort Worth to the Plano/Richardson area. (See Map 1).

The analysis proceeded through three stages:

1) Data collection, corridor analysis and identification of initial possible revenue sources
2) Evaluation of potential revenue sources
3) Comparison of revenue sources and funding uses

In addition, Phase 1 included extensive outreach to inform, engage and listen to key stakeholders and partners – particularly cities and counties within the corridor. As the iFi recommendations represent a new way of doing business in North Texas, the iFi team helped local leaders understand this innovative approach and the advantages and impacts of financing passenger rail service in the Cotton Belt Corridor.

A key iFi project premise is value-capture-based revenue mechanisms can be utilized (as a component of a complete funding package) to close the Cotton Belt funding gap.

Value is created, and potentially available for capture, when enhanced access (provided by passenger rail service) is complemented by proactive planning. The land development opportunities and associated property value increases created along the Cotton Belt Corridor can, in turn, be harnessed to finance the passenger rail service. The iFi recommends an innovative linkage of institutions and economic drivers – and of sustainable development patterns and transportation for economic development – to redefine how transportation infrastructure is delivered in the Dallas-Fort Worth (D-FW) region and the nation.

Value is created when enhanced access is complemented by proactive planning.

The iFi Phase 1 effort documents the potential to create value from network economics throughout the Cotton Belt Corridor. This value could be used to help finance, design, build, operate and maintain (FDBOM) new passenger rail service. An option under consideration is to secure a provider or consortium for most or all project implementation services. Pursuing this path requires identifying and committing, in advance, sufficient local revenue streams to repay the provider's investment over time.

THE FUNDING NEED

Traditional infrastructure funding sources are evaporating. Our economy, nationally and locally, depends on transportation investments for continued prosperity. But how to fund transportation investments is now fundamentally in question. The federal gas tax no longer provides sufficient funding for the transportation systems required by our growing region and nation. Increased vehicle fuel efficiency and the political inclination to not increase taxes will continue to widen the gas tax funding gap over time. Locally, sales taxes are insufficient to fund additional passenger rail investments.

Over the next several decades, the D-FW region will continue to grow. Millions of new residents and parallel job growth will be added to the region. This growth presents an opportunity to focus on the quality and character of our neighborhoods, employment centers and other great places. The Cotton Belt offers an opportunity to reconnect development patterns and transportation in a planned context, leveraging the economy of a corridor through a regional partnership to generate funding capacity for investment in passenger rail, local infrastructure and great neighborhoods.

Traditional sources of infrastructure funding are evaporating... …an innovative approach is needed.

In this context, the iFi project is a transaction-focused effort to grow investment capacity within the Cotton Belt Corridor and beyond. The North Central Texas Council of Governments (NCTCOG) and the Regional Transportation Council (RTC) have undertaken this initiative at the request of the corridor's transit providers. This will provide a more sustainable funding capacity — and to deliver passenger rail service to the Corridor decades sooner than is possible with traditional funding approaches.

Because the Cotton Belt cannot currently be funded with traditional public subsidies and resulting public finance, an innovative approach is needed.

THE REVENUE ANALYSIS

In addition to more traditional approaches to transit funding, the iFi recommends enhanced funding associated with operations (including higher farebox recovery), and value capture associated with adjacent real estate development.

The iFi analysis researched over 125 revenue sources with the potential to repay an investment to finance, design, build, operate and maintain the Cotton Belt. Of those, the most promising have been put together in a package to create the recommended iFi approach. Taken together, their gap-closing capacity could be substantial. The revenue sources fall into two broad categories:

Geographic

- Value capture through special districts or other similar mechanisms
- Public-land development concessions

Non-geographic

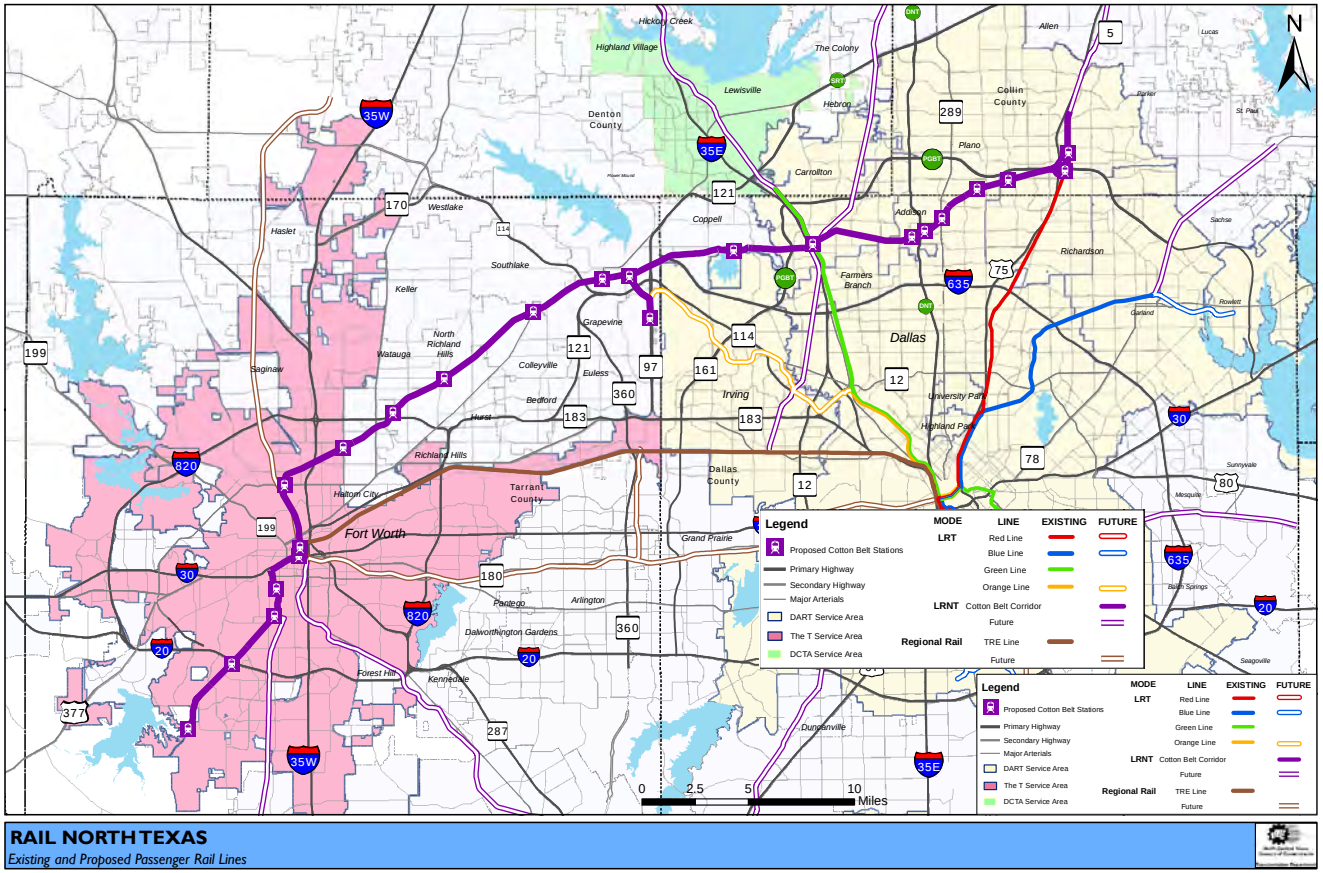
- Advertising and naming rights
- Fiber optic access licenses
- Enhanced farebox recovery/rapid card deployment
- Cost optimization of technology, design and operations

The geographic value capture revenue sources were based on a detailed, site-specific analysis of 27 potential station areas (see maps in Appendix A) comprising approximately 9,000 acres. This analysis was based on extensive stakeholder interviews (see Section 5); development projections based on those interviews; historic growth trends in the region; analysis of parcel-specific existing conditions and potential adjacent development; recommended implementation of sustainable development policies; and form-based zoning. (See Section 2 for analysis details.)

The non-geographic revenue sources are related to opportunities associated with rail operations or the corridor itself.

The revenue analysis results should not be viewed as equivalent to the financeable amount available for project implementation. It is possible the aggregate revenue identified here is insufficient as the basis of overall project financing. While several individual revenue streams in the equation (such as dedicated sales tax payments from Grapevine) could be used relatively easily as the basis of conventional public debt finance, others are more

Map 1 THE COTTON BELT CORRIDOR VICINITY MAP



The Cotton Belt Corridor is shown in purple, with proposed passenger rail stations. Details on the individual station areas appear in Appendix A.

appropriately involved in a concession package, with some risk transferred to a concessionaire.

THE FINDINGS

The iFi Phase 1 identified and developed a preliminary set of potential revenue streams able to provide a viable option to reduce the Cotton Belt funding gap. Revenue streams identified for the Cotton Belt could generate a net present value estimated at $2.1 billion to $3.0 billion, depending on assumptions and inputs used in the finance model. (Refer to Appendix B.)

Property value capture accounts for the largest share of this total – approximately 40 percent, depending on the scenario. Revenues from sales tax and farebox contribute another 20 percent to 25 percent. The remainder is derived from cash/current commitments, New Starts federal funding, and non-geographic revenue sources.

The estimated $2.1 billion to $3.0 billion value range assumes the area adjacent to the Cotton Belt will attract and absorb 2.11 percent of the region's total population growth and 1.75 percent of its employment growth over the next 40 years. These projections are based on standard assumptions regarding household size and jobs per square foot, in combination with NCTCOG population and employment forecasts.

System cost estimates are provided by Dallas Area Rapid Transit (DART) and the Fort Worth Transportation Authority (The T). Accurate capital costs for the Cotton Belt can be known only when real project bids are solicited and received. Accurate operating cost projections can be known only when providers committing to operate the system have provided guaranteed quotations.

As cost estimates are refined, the following elements are implicit in the iFi analysis:

- A public policy orientation that maximizes transit-supportive development, especially as it relates to the planned regulatory context in a particular station area
- Preservation of financial capacity to both adequately fund local infrastructure and provide needed public services
- Implementation of a farebox system using a “smart card” technology that better matches fees to a particular user, to enhance both ridership and revenue
- Realizing the network benefits of interconnection with existing rail transit
- Facilitate the appropriate rolling stock technology development to align service operations, cost and station-area value capture responsive to the highest possible ‘choice’ riders

NEXT STEPS

The analysis provided in this report establishes the potential collective capacity, through a regional partnership and local mechanisms, to deliver passenger rail service to the Cotton Belt Corridor. The following key issues to be addressed in Phase 2 include:

- Equity concerns among jurisdictions
- Specific allocations of resources within a particular jurisdiction
- Facilitating private financing by a private provider or consortium, if desired

The iFi Phase 1 recommendations represent an exciting new approach to funding passenger rail service and, more generally, all transportation modes in the D-FW region. The Cotton Belt Corridor represents an opportunity to create and deploy this new approach.

SECTION I

The Need For Innovative Financing

SECTION 1

The Need For Innovative Financing

Conversations throughout the Cotton Belt Corridor have made one thing clear: Our cities and counties are proactive about their future. In that regard, stakeholders in the corridor view passenger rail service as a tool to improve their economic bottom line over the long term. This is accomplished by connecting each station area community to the D-FW region's multi-billion dollar economy.

Cotton Belt Corridor cities and counties realize they do not have sufficient resources alone to build the Cotton Belt passenger rail system and local station area infrastructure. They also are aware the federal government and the State of Texas cannot afford to build the Cotton Belt passenger rail system for them.

So how can the local jurisdictions participate in contructing a passenger rail service that fuels a sustainable and growing economy for decades and generations to come?

The Innovative Finance Initiative (iFi) approach provides a solution. The iFi approach does not create or impose new taxes. The approach is fiscally realistic, viable and prudent. It is forward-thinking and provides for a better future.

1.1 TRANSPORTATION FUNDING: A CHANGING LANDSCAPE

Highway and passenger rail systems have been successfully funded and built in the D-FW region for decades. But the primary funding source – gas tax revenues – which historically has funded transportation infrastructure, can no longer keep pace. Federal grants and local sales tax for passenger rail service likewise are insufficient.

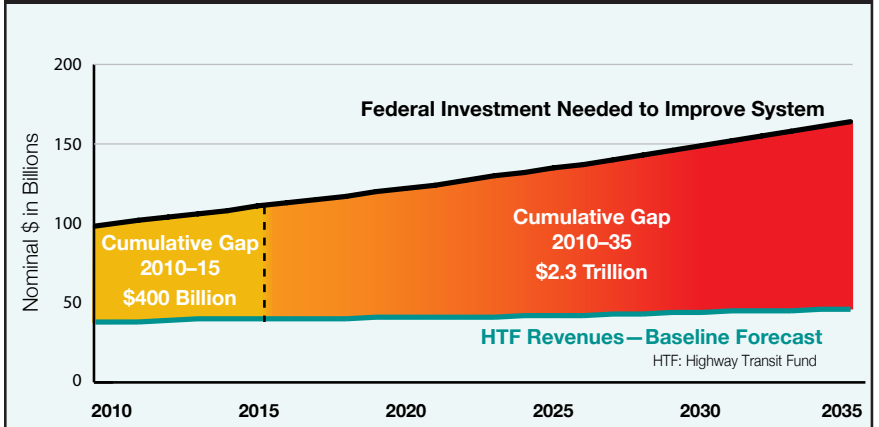
Table 1 illustrates the gas tax revenues funding gap. The graph identifies a shortfall of funds to maintain the current system.

In the past, the gas tax created a revenue stream sufficient to build extensive transportation systems. But today that economic model is broken. Going forward, gas tax revenues will be sufficient to pay for existing facility maintenance only, not build new facilities.

The D-FW region – like other regions around the country – faces a difficult question: What do we do when the

Federal grants and local sales tax for passenger rail service … are insufficient.

Table 1 A LARGE AND WIDENING GAP BETWEEN FEDERAL REVENUES AND INVESTMENT NEEDS 2010-35 (in nominal dollars)



Sources: TTI 2007 Urban Mobility, FHWA 2006 C&P, TCRP 2008 State and National Public Transportation Needs.

Credit: Paying Our Way: A New Framework for Transportation Finance. Report of the National Surface Transportation Infrastructure Financing Commission. March 2009

Gas-tax revenues do not generate enough funds to maintain current system.

federal government cannot provide the funding for the transportation systems we need? The answer is what iFi is all about: Defining and implementing a new approach to building transportation infrastructure that supports future growth and economic development.

1.2 PASSENGER RAIL AND GLOBALLY COMPETITIVE CITIES

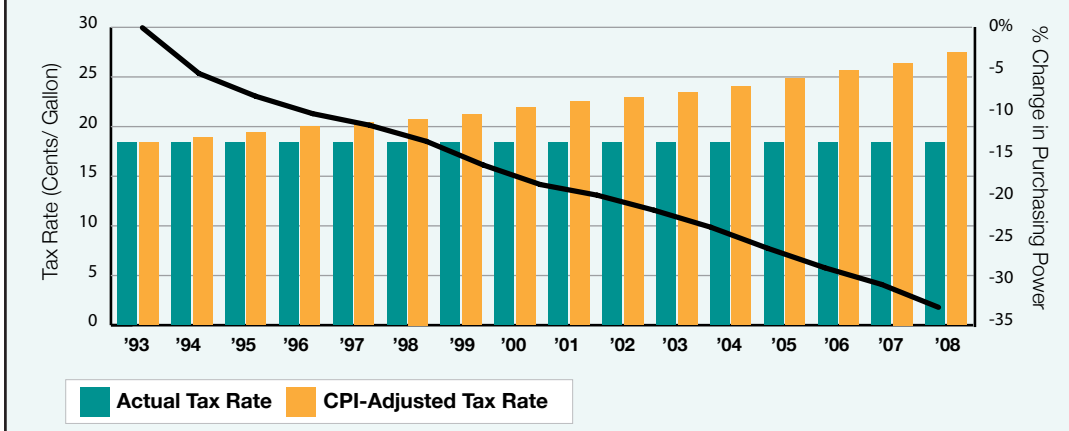
As individual cities, as a region, and as a nation, we stand at a crossroads. Growing regions are, by definition, where people want to be; they fuel job creation and economic prosperity. But population growth creates a need for enormously expensive new infrastructure as well. We must provide not only for today's needs, but for future generations – while being prudent financial stewards in the present.

To build the Cotton Belt – indeed, to build any major new transportation system – new finance solutions have become imperative. Traditional funding sources simply cannot get the job done in this global economy, as cities and regions compete with one another. Leading economists point to passenger rail as a critical component of a competitive city. It is not just a way to move from Point A to Point B. Passenger rail stimulates development and redevelopment and shapes communities. Passenger rail offers the power to link cities into powerful economic networks.

For Cotton Belt communities, adopting iFi concepts is about choosing a vision for the future. It is an investment in jobs and economic growth, in attracting young people and families, in creating business opportunities, and in developing new live-work-shop-play activity centers served by passenger rail. The iFi approach marries finance with development pattern planning to create places that smartly and strategically attract people, new homes and businesses.

To understand the need for innovative financing mechanisms, it is useful to review how our highways and other transportation infrastructure have been financed.

Table 2 FEDERAL GASOLINE TAX RATE AND LOSS IN PURCHASING POWER

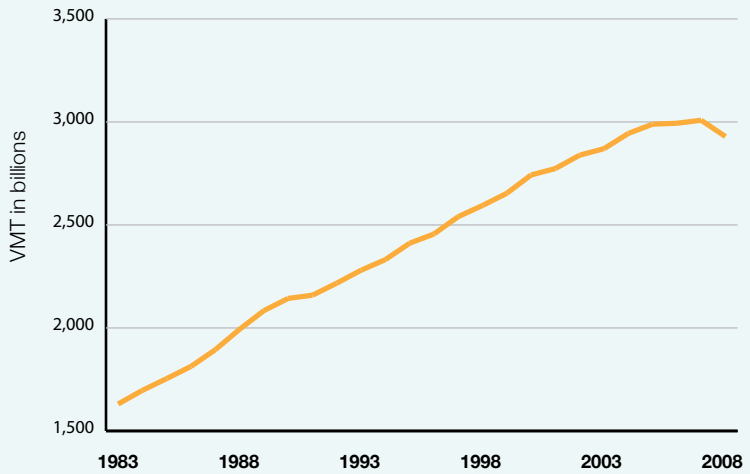


Source: FHWA 2006 Highway Statistics, Table FE-21B, indexed using CPI-U as reported by the Bureau of Labor Statistics.

Credit: Paying Our Way: A New Framework for Transportation Finance. Report of the National Surface Transportation Infrastructure Financing Commission. March 2009

A significant loss in purchasing power resulted from not raising the gas tax rate.

Table 3 ANNUAL VEHICLE MILES TRAVELED

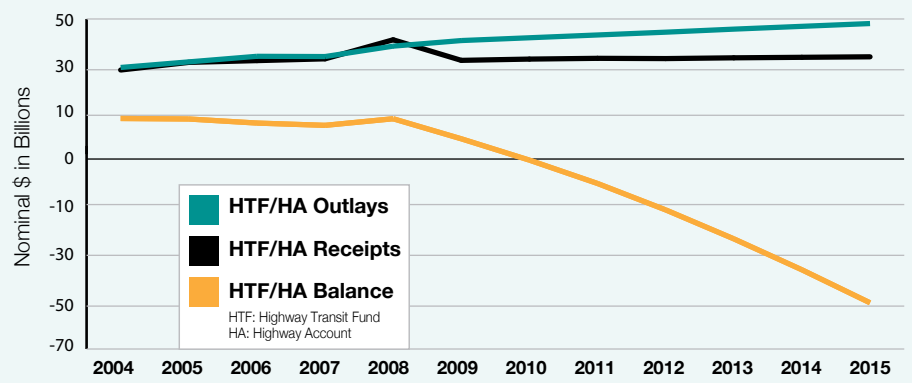


Source: FHWA Travel Monitoring: August 2008 Volume Traffic Trends

Credit: Paying Our Way: A New Framework for Transportation Finance. Report of the National Surface Transportation Infrastructure Financing Commission. March 2009

Vehicle miles traveled stopped increasing and now are declining.

Table 4 HTF / HIGHWAY ACCOUNT CURRENT TRENDS

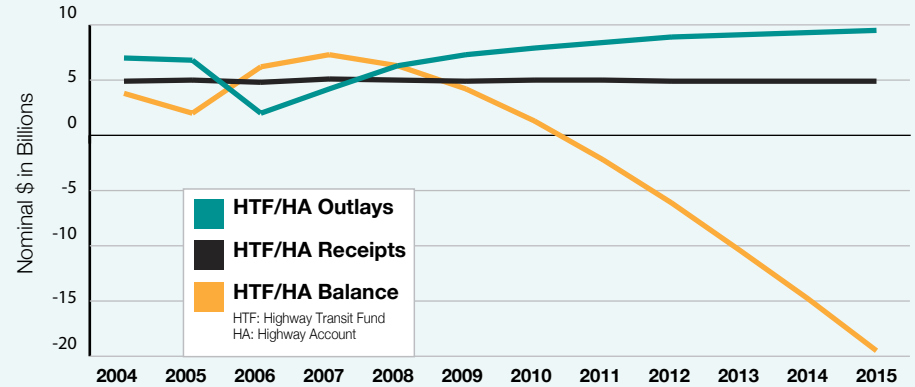


Source: Forecasts made by AASHTO using its federal HTF funding model and based on assumptions contained in the Midsession Review of the FY 2009 Budget

Credit: Paying Our Way: A New Framework for Transportation Finance. Report of the National Surface Transportation Infrastructure Financing Commission. March 2009

Funds are insufficient for current surface transportation spending levels.

Table 5 HTF / TRANSIT ACCOUNT CURRENT TRENDS



Source: Forecasts made by AASHTO using its federal HTF funding model and based on assumptions contained in the Midsession Review of the FY 2009 Budget.

Credit: Paying Our Way: A New Framework for Transportation Finance. Report of the National Surface Transportation Infrastructure Financing Commission. March 2009

The transit account balance is declining.

1.3 SURFACE TRANSPORTATION FUNDING AND THE GAS TAX SHORTFALL

The interstate highway system is associated with President Eisenhower; however, it was President Roosevelt who first advanced a means of financing an extremely expensive proposal for superhighways. President Roosevelt's proposal was a form of value capture.

In 1939, the Bureau of Public Roads provided a report to Congress titled "Toll Roads and Free Roads." The report included a recommendation to recoup the cost of road building by renting and selling land adjacent to the highways, advocating the subsequent increased land values should not be distributed arbitrarily, but be used to benefit the public whose funds had created the value:

> *We all know that it is largely a matter of chance if a new highway is located through one man's land and misses another man's land a few miles away. Yet the man who, by good fortune, sells a narrow right-of-way for a new highway makes a handsome profit through the increase in value of all the rest of his land. That represents an unearned increment of profit – a profit which comes to a mere handful of lucky citizens and which is denied to the vast majority.*

World War II interrupted Roosevelt's highway plan, and the next report was delivered in 1956 by General Lucius Clay. With brilliant efficiency, the concept of "users" was focused on cars and trucks only, with excise taxes on gasoline. No attention was given to the resulting land development or to businesses that directly benefited from the road building. The nation was focused solely on building a new interstate highway system quickly.

As a financing model, the gas tax was a remarkably efficient means of achieving the narrow aim of road construction. Funds were so plentiful that a portion of the Highway Trust Fund later was dedicated to public transportation. Fiscally, the gas tax could sustain the

interstate highway system – including funding new rail transit – as long as three conditions were present:

1) the gas tax was periodically increased to keep pace with inflation

2) the total vehicle miles traveled by the public continually increased

3) fuel efficiency did not appreciably increase

By 2007, all three conditions were no longer present. Federal funding of the US highway system through the gas tax began a period of decline. The gap between the nation's transportation infrastructure needs and what the gas tax can yield is growing and permanent. To cover the costs of constructing, operating and maintaining the highway system (even without adding high speed rail between cities) the gas tax rate would need to be dramatically increased. However, the political will to raise taxes of any kind does not currently exist.

The gap between the nation's transportation infrastructure needs and what the gas tax can yield is growing and permanent.

More ominously (in terms of future gas tax revenues), the nation and the world are focused on making vehicles more fuel efficient, and on developing alternative fuels and electric-powered vehicles. As technology evolves, the day can be anticipated when cars no longer are fueled by gasoline. Federal, state, and local governments have failed to identify the gasoline tax's replacement as a recurring transportation funding source.

Moreover, current revenues may not be sufficient to cover current system maintenance – and revenues are far short of adequate to build new roads. Because the gas tax also has been used to fund passenger rail service, regional rail authorities (like state departments of transportation) can no longer depend on the federal government as a source of adequate funding for new construction.

Just when the US and regions like Dallas-Fort Worth need every advantage to compete globally, mobility is decreasing and congestion increasing. The lack of funding is exacerbated by recent development patterns, in which the gas-tax-funded roads are used not primarily for the inter-city movement of people and goods, but for commuting between cities and their suburbs. Commuter traffic congestion thus has slowed goods movement and is affecting our economic productivity.

For over 50 years, developers have been perfecting their own "value capture" business model based on taxpayers' investments in the highway system. Highways paid for by the gas tax have enabled developers to purchase relatively inexpensive land far away from city centers; build suburbs; and use "free" highways to link the homes and office parks they develop to each other and to the urban core.

While a "sprawl" development pattern has long fueled our economy (see Section 4 for related benefits of harnessing "sprawl"), it also has rapidly devoured our highway capacity, resulting in congestion and ultimately creating an expectation of continual highway expansion that today is not fiscally sustainable.

1.4 VALUE CAPTURE'S HISTORICAL ROLE IN PASSENGER RAIL FINANCE

As a funding approach, the value capture model utilized in the iFi effort builds on historical models that predate the gas tax. While the funding mechanism for transportation during our lifetimes has primarily been the gas tax, and broad-based taxes on property and sales, this has not always been the case. It contrasts with historical mechanisms that tied the financing of infrastructure to commercial enterprises – whether trade or land development. Historically the value infrastructure provides to finance transportation improvements has been captured.

Indeed, private-sector financing – not public taxation – is what built streetcar systems across the US during the late 19th and early 20th centuries. Developers raised the investment capital needed to build the lines by banking on the increases in property value created by a streetcar. The purpose was not merely to move people from one place to another; it was expressly to open new land for development. Private developers used the streetcar to bring customers to the land they wished to sell for development.

This strategy was effective. Access to passenger rail service powerfully shaped land development patterns. Cities developed more densely near streetcar lines. As an example, Map 2 illustrates how this occurred in the Twin Cities of Minneapolis and St. Paul from 1900 to 1930 (developed areas appear in gray).

While innovative in its capitalization approach (and its regional scale), innovative financing initiatives have roots in an earlier chapter in America's economic growth. Specifically:

- Before the advent of the automobile, in the late 1800s and early 1900s, growing young cities (such as Dallas and Fort Worth) made franchises available to private developers and other companies to build streetcar/trolley systems.
- Development companies privately financed and built streetcar lines (or electric-powered trolley buses) along routes that connected tracts of land they owned – where they planned to build new residential neighborhoods – to the central city.
- The early 20th century finance model successfully anticipated the increase in property values created by passenger rail service. Development companies obtained investor financing for streetcar line construction (or were willing to self-finance) based on the tremendous increases in land value and development opportunity created, once a site for a new planned neighborhood gained streetcar service.
- Effectively, streetcars were made possible by the capitalization of anticipated increases in property value. This allowed the financing of streetcar systems nationwide.
- Nearly every city in the US with a population over 10,000 (including Dallas and Fort Worth) had at least one streetcar company. Almost all were privately owned. In 1920, an estimated 90 percent of all trips were by passenger rail – on 1,200 separate electric streetcar and interurban railways in cities nationwide. These systems totaled 44,000 miles of track, provided jobs to 300,000 people, and provided 15 billion annual passenger trips.
- The robust growth of American cities in this period was made possible by passenger rail systems. It was the streetcars and trolleys that opened up new land for private development (i.e. the first suburbs) and created explosive economic development opportunities. Commercial areas typically developed around streetcar stops in neighborhoods, with small locally owned retail, restaurants, and other neighborhood services.
- Locally, the investment in streetcar lines yielded strong returns for developers, and for other private companies obtaining passenger rail system franchises. Development companies used the profits from land-value appreciation to recoup the investment in rail. They realized sizeable profits on home sales, while providing for the housing needs of a growing America.

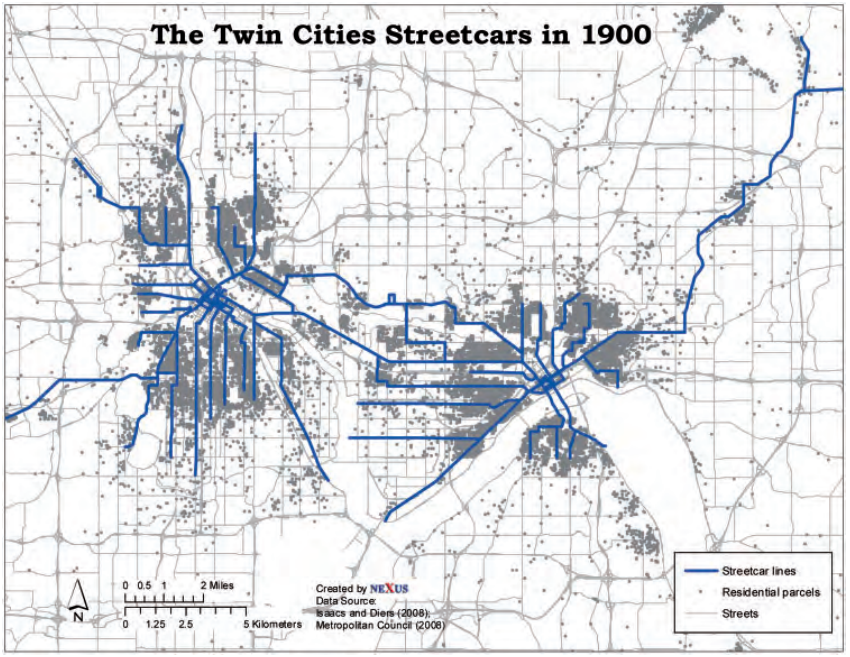
1.5 THE CHANGING PURPOSES OF PASSENGER RAIL

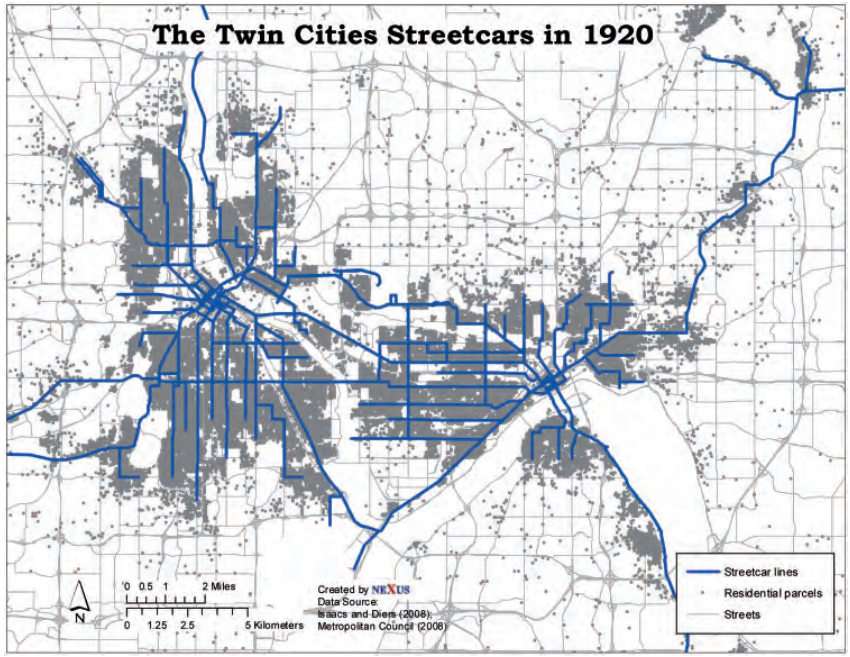
In the late 1970s, the US again turned to passenger rail. This time, however, the purpose was not economic development. A series of passenger rail systems were built to relieve highway congestion by offering another transportation alternative, starting in Washington D.C., San Francisco and Atlanta. The systems were funded entirely by the public sector, and riders were expected to reach stations by car. As a result, little thought was given to linkages with surrounding new development.

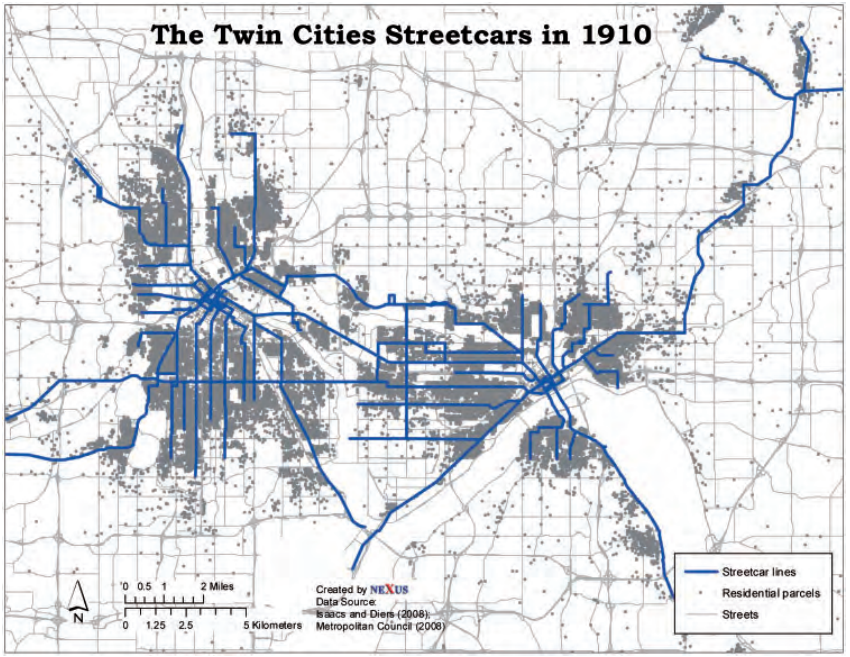
Another wave of transit systems, mostly light rail, began in the late 1980s and 1990s, including Portland, Los Angeles, St. Louis, Denver, Dallas and Houston. By this time, the concept of transit-oriented development (TOD) was embraced as a method of promoting more efficient development patterns within major cities.

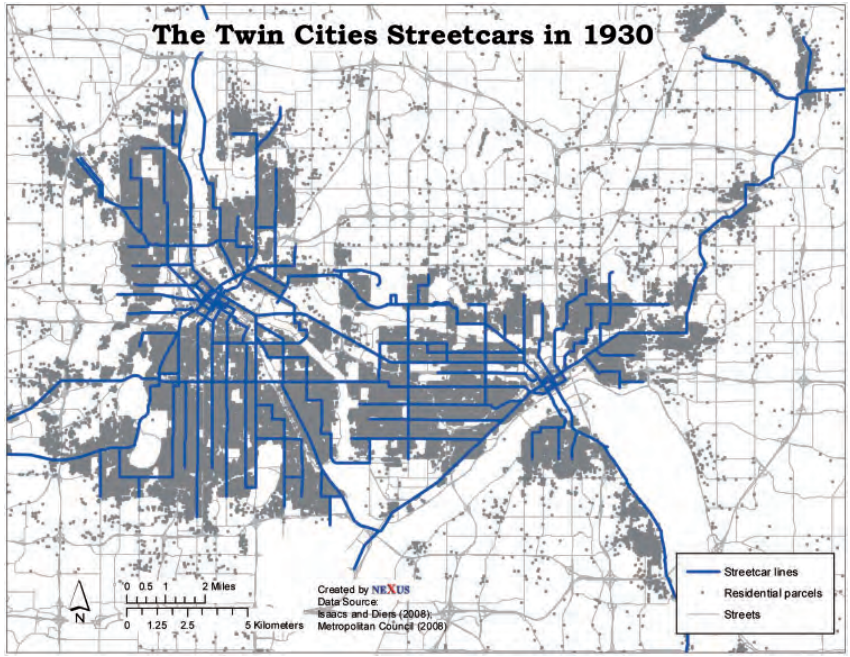
With experience, transit agencies gradually began to realize the many benefits and efficiencies accrued when transportation infrastructure planning was done in conjunction with land development planning. This led transit agencies to begin planning regional systems of transit networks, rather than incremental single segments. Passenger rail benefits generally include:

Map 2 HOW RAIL TRANSIT SHAPED DEVELOPMENT PATTERNS: Twin Cities of Minneapolis and St. Paul, 1900 – 1930









Source: Maps downloaded from joeg.oxfordjournals.org at University of Minnesota Libraries – Wilson Library, for source research report, "How streetcars shaped suburbanization: a Granger causality analysis of land use and transit in the Twin Cities," by Feng Xie and David Levinson.*

Environmental Benefits

- Reduced traffic congestion and noise impacts
- Reduced fuel consumption
- Reduced air pollution
- Conservation of natural open space from reduced sprawl

Social Benefits

- Reduced traffic incidents
- Health benefits with increased walking
- Expanded access to housing, service and shopping choices

Economic Benefits

- Increased tax revenues
- Reduced road and parking costs
- More employment access and options
- Neighborhood revitalization
- Economic development spurred along rail lines

With resurgent interest in streetcar and light rail systems in many cities, communities began to consider the use of value-capture to provide local revenues for passenger rail.

The incremental increase in property values along the line – directly attributable to passenger rail – successfully funded a portion of Portland's new streetcar system. Like the streetcar systems of 100 years ago, the *raison d'etre* for Portland's streetcar was not mere mobility; the expressed purpose was to develop an abandoned brownfield rail yard called the Pearl District, which is now a vibrant urban village directly attributable to the Portland Streetcar system implementation. How was this done?

The Portland Streetcar project properly turned "transit-oriented development" on its head. After all, if the goal is to finance infrastructure with value capture finance mechanisms, it is transit that should be planned in anticipation of development, not the other way around. Thus, Portland proudly defines its model in reverse, as "development-oriented transit."

In 2001, Portland opened the first modern streetcar in North America. Its unique public-private strategy was to link investment in high quality development to passenger rail. Portland's description of its goals contained in an April 2008 Development Report is remarkably similar to the Cotton Belt Corridor challenges and aspirations.

…transit should be planned in anticipation of development.

Like many other cities, Portland is growing in population and is proactively looking for ways to promote economic development while managing growth. Keeping Downtown Portland healthy is critical to the region's economic stability. The Portland Streetcar is at the heart of a new approach to shaping cities that promotes investment at the City's core, provides homes for people of diverse income groups and supports the urban amenities that make great cities great. Since 1997 when the original streetcar alignment was identified, properties along its length have experienced significant changes:

$3.5 billion has been invested within two blocks of the streetcar alignment.

10,212 new housing units and 5.4 million square feet of office, institutional, retail and hotel construction have been constructed within two blocks of the alignment.

55 percent of all CBD development since 1997 has occurred within one block of the streetcar [previously 19 percent] and properties located closest to the streetcar line more closely approach the zoned density potential than properties situated farther away.

Developers are building new residential buildings with significantly lower parking ratios than anywhere else in the region.

How does Portland's example relate to the D-FW region? A study by the University of North Texas found that between 1999 and 2007, $4.26 billion

in development along passenger rail lines was attributable to DART's light rail system. But, an opportunity has been missed by the D-FW region: Using the value of those projects to finance passenger rail.

Access creates value.

Perhaps more importantly, how much more value could have been realized, had land development been planned before building passenger rail? How much funding did the D-FW region leave on the table?

Whether one examines the historical role of value capture in privately operated streetcars, or the well-documented record of development surrounding stations in modern public light rail systems, the outcome is the same: Access creates value.

Therefore, the iFi effort is based on the premise that capturing the value of accessibility will help our metropolitan region develop sustainable transportation revenue streams.

1.6 THE LOCAL CONTEXT: RECONNECTING LAND PLANNING AND TRANSPORTATION FINANCE

In the coming decades, the D-FW region anticipates gaining millions of residents with corresponding job growth. This growth presents an opportunity to focus on the quality and character of our neighborhoods, employment centers and other strategic land uses. It requires a sustainable approach to development.

Transportation and development patterns are inextricably tied together, whether the relationship is treated reactively (public infrastructure followed by ad hoc private commercial development) or proactively (concomitant transportation with land planning focused on urban form and urban design). The Cotton Belt offers an opportunity to reconnect land development patterns and transportation in a planned context, leveraging the corridor's economy to generate funding capacity for investment in passenger rail, local infrastructure and neighborhoods.

When completed, the Cotton Belt will link more than a dozen cities, four counties, DFW Airport, three universities, the Trinity Railway Express, all four DART light rail system lines, the Denton County Transportation Authority (DCTA) A-train, and two major toll roads. In terms of passenger rail alone, it will be the spine for more than 300 miles of potential passenger rail service in the D-FW region.

Because sufficient traditional funding sources are not available to design, construct and operate the Cotton Belt, the region has turned to innovation. An innovative approach harnesses the value of a strategic corridor in a sustainable context. The approach combines resources among traditional institutions and across jurisdictional lines to deliver a project that benefits both the specific corridor and the larger regional system of conveniently accessible destinations. Fundamentally, it uses the power of network economics to leverage resources into a sum greater than its individual parts.

1.7 ONE REGION, ONE SYSTEM, ONE CORRIDOR

A single transportation corridor does not exist in isolation. As with any transportation mode, passenger rail is intricately woven into the fabric of a region's character. Mobility is a common thread that ties together land uses and people. Passenger rail success is dependent upon connections to many elements – other passenger rail corridors, automobile, bus, pedestrian, bicycle and land-use components. The Cotton Belt Corridor is no different. The Cotton Belt iFi recognizes the value a comprehensive and cohesive transportation and land-use system provides to a region. The Cotton Belt Corridor's benefits to the region are directly dependent upon the concept of local bias exchanged for regional cooperation. However, equitable contributions will need to play a prominent role toward successful Cotton Belt Corridor implementation.

1.7.1 Equity

Several equity issues have surfaced during the iFi Phase 1 effort. As non-member cities realize benefits from the current system (which is primarily funded through member city sales tax revenues) member cities cite various inequities. Simply, the non-member cities use sales tax revenues for economic development initiatives while member cities allocate sales tax

revenues to public transportation service. Member cities cite this inequity as unfair. In addition to member city versus non-member city concerns, the eastern and western transit service providers require different member city contributions. Satisfaction of equitable contribution issues is imperative to moving the Cotton Belt passenger rail project forward.

The definition of funding equity – as applied to the Cotton Belt Corridor – is subjective and will require further discussion and public involvement. As a technical analysis, the iFi was not intended to analyze or determine equity issues. For funding equity and similar issues to be effectively resolved, for the region's greatest benefit, individual ideology will need to be replaced with collective vision. Stakeholders will need to analyze how a collective effort can advance their individual interests.

1.7.2 Dallas-Fort Worth International Airport

The issue of equity in transportation infrastructure funding is not new to the D-FW region. One noteworthy example of how the region dealt with funding equity issues is Dallas Fort Worth International Airport (DFW Airport). As with the DFW Airport, the Cotton Belt Corridor is a regional transportation asset fostering many benefits for the entire region.

In the late 1960s and early 1970s, regional cooperation was key to DFW Airport development. Funding was provided solely by the cities of Dallas and Fort Worth. While many raised concerns about equity, clearly the investment was wise for the area's two principal cities. As evidenced by the region's explosive growth over the past four decades, DFW Airport has provided immense regional benefits while initially funded by two cities. The funds invested have been returned many-fold to the two funding contributors. Currently, it is estimated DFW Airport provides the following regional benefits:

- Economic Impact: $16 billion annually
- Employment: 305,000
- Payroll: $7 billion annually

Cotton Belt Corridor passenger rail will similarly provide significant benefits to not only the primary corridor-funding entities, but the entire region. Leveraging this history of regional cooperation, the Cotton Belt will expand access to DFW Airport, directly linking three major universities as well as connecting hundreds of thousands of corridor-area residents to major employment centers, shopping and dining, and community facilities.

1.7.3 Equity Concepts

The iFi Phase 1 effort assembled several potential strategies regarding equitable funding contributions. The list is not exhaustive, but is intended to provide a basis for an initial analysis.

- Dedicate portion of 4A/4B sales tax revenues from non-member cities
- Annual monetary payment from general revenue funds paid by non-member cities
- Greater percentage share of tax increment financing (TIF) revenues dedicated to the Cotton Belt Corridor from non-member cities than member cities
- Modified fare structure, to include higher cost per mile for non-member city residents, utilizing "smart card" fare collection technology
- Higher parking cost for non-member city residents
- Declare revenues collected in the corridor stay in the corridor, regardless of origination or destination

Stakeholders will need to analyze how a collective effort can advance their individual interests.

Committing to a particular strategy or set of strategies is not currently recommended. Additional analysis and discussion will be included in subsequent project efforts to determine the most appropriate solution for funding the Cotton Belt Corridor.

The iFi Phase 1 assignment is to identify viable funding sources applicable

for the Cotton Belt Corridor. Appropriateness and suitability of funding equity throughout the corridor has not been addressed with this technical analysis. Equitable contribution resolution is an issue best addressed by the region's policy officials.

1.7.4 Equity Example

One possible scenario regarding equity among local government jurisdictions within the Cotton Belt Corridor is to apply the City of Grapevine sales tax example. Under agreement with The T, the City of Grapevine will contribute three-eighths cent sales tax revenues to The T for providing passenger rail service to the city. The three-eighths cent amount is three-fourths of the one-half cent sales tax levied to the City of Fort Worth for bus and passenger rail service. A three-fourths cent sales tax levy (based on one cent levied to DART member cities for bus and passenger rail service) to cities along the eastern corridor segments for passenger rail service is consistent with Grapevine's "three-fourths of one-half" ratio for rail service. Table 6 identifies annual taxable sales tax revenue estimates using the described methodology.

Table 6 ANNUAL TAXABLE SALES TAX REVENUE ESTIMATES

Cotton Belt Corridor Transit Agency Non-member Cities

City	Taxable Sales ($2010)	0.750%	0.375%
Haltom City	$435,043,033		$1,631,411
North Richland Hills	$644,764,648		$2,417,867
Southlake	$736,948,877		$2,763,558
Colleyville	$148,288,916		$556,083
Grapevine	$1,824,151,022		$6,840,566
Coppell	$577,786,075	$4,333,396	
Hurst	$803,573,594		$3,013,401

Source: Partnership for Liveable Communities, July 2011

1.8 iFi: THE TIMELY OPPORTUNITY

At a fast rate, transportation needs are outstripping our ability to pay. It is important to understand the source of the growing transportation funding shortfall. This is not an aberration to be cured with reforms to the current system. It is not a recession symptom. It is a permanent condition, the new reality. If the D-FW region is to flourish in the fiercely competitive global economy, it must adapt.

Rather than depending on the outmoded transportation finance model of the last 50 years, we can draw upon lessons from our past — when the country financed new transportation infrastructure by leveraging the value that it created — to continue our prosperity. The iFi concepts offer a promising new path for funding the region's future transportation investments.

SECTION 2

Revenue Analysis

SECTION 2

Revenue Analysis

2.1 OVERVIEW

The iFi analysis identifies broad estimates for a range of potential revenues associated with Cotton Belt Corridor implementation as a system. As a result, the Cotton Belt is treated as a whole from southwest Fort Worth to Richardson/Plano. No effort has been made to segment potential revenues into "east versus west" components.

These results are best viewed in the aggregate, as the variance of any individual revenue stream is likely to be greater than the variance of the sum of revenue streams analyzed. This is especially true for the value capture results. While the analysis was developed at the station-area level, the reality of actual development within a station area, as well as the structure of any associated public-private partnership, will vary considerably across the corridor.

The scenarios developed and presented should represent the range of likely outcomes from Cotton Belt implementation. However, capacity has been put in place to allow assumptions on a range of factors that can be changed quickly and easily, including:

- Inflation and discount rates
- Value capture shares allocated to the project
- Shares of existing revenue streams (such as type 4B sales tax revenues from transit authority non-member cities) that can be accessed

The compound annual consumer price index (CPI) growth rate over the last 10, 20, 30, and 40 years yields inflation rates of 2.39 percent (10-year compound annual growth); 2.59 percent (20-year compound annual growth); 3.30 percent (30-year compound annual growth); and 4.41 percent (40-year compound annual growth). The 10-year and 20-year rates are used. Per assumptions regarding public-sector cost of funds and conversations with local finance experts, initial discount rates are set at 5 percent and alternatively at 7 percent. The inflation and discount assumptions apply across all analyses for each scenario.

…land use planning … must fully integrate … principles that create economic value associated with transportation infrastructure.

It is important to note the potentially available revenue streams identified (in particular, value capture) will be dependent upon the pace and ultimate scale of land development within the Cotton Belt Corridor. To realize the projected revenue potential, land use planning for the Cotton Belt Corridor must fully integrate placemaking principles that create economic value associated with sustainable development patterns and complementary transportation infrastructure.

The following elements are implicit in the analyses and forecasts.

- A public policy orientation maximizing sustainable real estate development, especially as it relates to the planned regulatory environment
- Preservation of financial capacity to fund local infrastructure adequately and provide needed public services
- Implementation of a farebox system using "smart card" technology that better matches fees to a particular user to enhance ridership and revenue

- Realizing the network benefits of interconnection with existing passenger rail service
- A vehicle technology able to achieve headways similar to a light rail vehicle technology

Finally, these results should not be viewed as equivalent to the financeable amount available for project implementation. Indeed, it is likely the aggregate revenue identified here would be insufficient as the basis of overall project finance. While several potential individual revenue streams (such as dedicated sales tax payments from Grapevine) could be used relatively easily as the basis of conventional public debt finance, others would better lend themselves to being part of a concession package, with risk transferred to the concessionaire. Policy discussions related to a core issue – how to move the facility analysis forward into future phases – should consider this concept when considering the possibility of including additional sources of value.

2.2 ANALYSIS SUMMARY

Depending on the assumptions incorporated, revenue identified for the Cotton Belt appears to have a net present value of approximately $2.0 billion to $2.9 billion. Value capture accounts for the largest share (approximately 33 percent to 40 percent, depending on the scenario). The combination of sales tax-related revenue (including the DART contribution) and farebox add another 25 percent to 33 percent of the total. The balance is anticipated to come from cash/current commitments, New Starts federal funding, and nongeographic revenue sources.

These findings appear reasonable, especially in the context of the volume of anticipated development in the affected areas as a share of overall regional growth. Using the 2.39 percent inflation scenario, the compound annual growth rate (new development + inflation) for the property base identified over the next 40 years is 6.39 percent; comparatively, the compound annual growth rate for the 12-county NCTCOG area from 1991-2009 was 6.33 percent.

Based on fairly standard assumptions regarding household size and jobs per square foot, in combination with NCTCOG population and employment forecasts, the area adjacent to the Cotton Belt is projected to account for 2.11 percent of the population and 1.75 percent of the employment growth over the next 40 years. As a result, the area around the Cotton Belt in 2051 would represent 1.00 percent of total regional population, and 1.11 percent of total regional employment.

2.3 POTENTIAL FUNDING SOURCES

The iFi has focused on identifying creative and innovative funding sources considered viable for transportation infrastructure uses. While many traditional funding sources are available, the iFi effort sought to analyze funding sources designed to expand the available funding mechanisms. Should innovative funding sources and strategies not be sufficient to adequately close the funding gap, traditional funding mechanisms may provide the needed funds.

2.3.1 Traditional Funding Sources

While many traditional funding sources listed are highly developed and widely used, some have been developed more recently and are not widely used.

From 2004 to 2009, various committees and studies organized or supported by NCTCOG have examined potential funding sources to implement passenger rail services throughout the region. Several potential traditional funding resources are briefly described below.

Access Fee – A fee assessed on non-residential taxable property (per square foot) located near transit facilities.

Bond Anticipation Note – Short-term bonds issued by governments and corporations anticipating the proceeds of a larger future bond. Issuing entities use the notes as short-term financing.

Capital Leasing – Transit agencies generally use capital leasing to help with purchasing transit vehicles.

Debt Service Reserve with Federal Transit Administration – Cash reserves set aside by a borrower to ensure full and timely payments to bond holders.

Driver's License Fee – A fee assessed to individuals for a new driver's license or license renewal.

Emissions Fee – A surcharge applied to personal vehicles during annual inspection.

Farebox Revenue Bonds – The Transportation Equity Act for the 21st Century (TEA-21) authorized the use of farebox revenues and anticipated grant receipts as collateral for revenue bonds.

Grant Anticipation Notes – Revenue bonds backed by anticipated grant receipts. Grant Anticipation Notes (GANs) were enabled by the establishment of program funding firewalls in TEA-21.

Local-Option Motor Fuel Sales Tax – A tax levied on the quantity of motor fuel purchased within a specified local government jurisdiction. State legislative action would be required to implement any additional motor fuel tax and for the revenue generated to be allocated to implementing passenger rail service.

Local Subsidy Option – This allows a municipality the option to raise revenue from designated sources.

Mobility Improvement Fee – A fee added to the annual vehicle registration fee.

Motor Vehicle Sales Tax – A tax levied on all retail motor vehicle sales in Texas. The tax could also be levied on motor vehicles purchased at retailers outside the state and used on Texas public highways by a Texas resident.

New Resident Impact Fee – Fee applied to new residents registering a vehicle in the State of Texas for the first time.

Payroll and Self Employment Tax – A percentage of wages paid by an employer and/or the net earnings from self-employment are taxed with proceeds used for services within a transit service boundary.

Property Tax – A local tax imposed on individual properties.

Public Improvement Districts – The Public Improvement District (PID) Assessment Act (Chapter 372 of Local Government Code) allows any city to levy and collect special assessments on property within the city or within the city's Extraterritorial Jurisdiction (ETJ).

Regional Toll Surcharge – A regional toll surcharge would be an additional flat rate fee per trip on designated toll facilities. The surcharge could be pooled and used for implementing passenger rail services. Possible legislative approval, in addition to approval and agreements between implementing toll road and transit agencies, would be required.

Sales Tax – Currently, the sales tax is capped at 8.25 percent. The state sales tax is 6.25 percent and local governments can collect up to 2 percent. Many municipalities utilize the full amount of local sales tax allowed. These municipalities are unable to contribute sales tax revenues to implement transit service. Legislative action would be required to raise the existing state sales tax cap to provide a funding source for passenger rail service.

Special Purpose District – Special purpose districts (SPD) are taxing entities created to generate revenue for a specific reason such as crime control, libraries or emergency services.

State Infrastructure Bank – The State Infrastructure Bank (SIB) is a revolving fund created and established by a state department of transportation with the capacity to offer direct loans and various lines of credit to enhance surface transportation projects.

Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) – The Act established a federal credit program for eligible transportation projects of national or regional significance under which the United States Department of Transportation (USDOT) may provide three forms of credit assistance – secured (direct) loans, loan guarantees, and standby lines of credit.

Vehicle Property Tax – A vehicle property (or ad valorem) tax is levied on the fair property value of a vehicle.

Vehicle Registration Fee – An annual assessment on vehicle ownership collected in Texas through the Department of Motor Vehicles.

2.3.2 Innovative Funding Sources Tiered Analysis

2.3.2.1 Initial Screening

After reviewing previous studies; understanding the region as a whole; and considering potential revenue sources, over 125 revenue sources were identified for potential application. The initial screening consisted of a cursory revenue generation analysis and an implementation feasibility analysis. The initial list included a wide range of conceivable sources. The list was pared based on a revenue model that can be eventually matched with cost allocations for purposes of financing both capital and operations and maintenance over time.

2.3.2.2 Refined Analysis

The resulting potential revenue sources can be differentiated into direct and indirect sources. Direct sources include development concessions and commitments of increased tax base resulting from coordinated planning within the corridor through value capture. Indirect sources could include "backstop" capacity from the D-FW Region's maturing toll system, among others. Further refinement produced several potential innovative revenue sources in two broad categories: non-geographic and geographic. Non-geographic revenue sources include advertising revenues, lease revenues, farebox recovery, and other sources. Geographic revenue soruces include public land development and land value capture sources. These revenue sources were used in efforts to monetize revenue streams for viable, innovative funding sources.

2.4 VIABLE FUNDING SOURCES

After examination of multiple potential revenue sources, broad categories of potential revenue/funding emerged. While each has been used to fund passenger rail projects elsewhere, the "innovative" aspect of the iFi lies in how these revenue streams are employed and combined, and the proposed scale, scope and/or technology of their application in the D-FW region.

Table 7 CASH AND CURRENT COMMITMENTS

with New Starts request	
in 2010 $Millions	
Grapevine (through 2015)	$61.00
The T	$60.00
Texas Mobility Fund	$60.00
Other FTA	$66.00
Tarrant County	$20.00
Other	$5.00
Total	**$272.00**
Other Value	
Station Construction	$70.00
Total Commitments	**$342.00**
New Starts	$415.00
TOTAL	**$757.00**

Source: Partnership for Liveable Communities, July 2011

The first, labeled "Cash and Current Commitments," (Table 7) reflects information provided by The T for TEX Rail, and is consistent with the pending TEX Rail New Starts application.

The second, "Farebox and Sales Tax," (Table 8) includes DART's potential annual contribution (beginning in 2036), the farebox associated with the Cotton Belt's operation, and sales tax from the region. This category includes Grapevine's dedicated three-eighth cent (beginning in 2016) and 10 percent of the local 4B sales tax from transit agency non-member cities.

The third, "Other External Sources," (Table 9) combines estimates of non-geographic revenue, including estimates for advertising, naming rights, and lease of fiber optic right-of-way.

Table 8 FAREBOX REVENUE AND SALES TAX COLLECTION

$Millions — Note: 2.39% inflation rate used

	Farebox			Sales Tax		
Year	$0.10/rider	$0.14/rider	$0.30/rider	Grapevine 0.375%	4B 10%	DART
2011-12	0	0	0	0	0	0
2013	0	0	0	0	$2.41	0
2014	0	0	0	0	$2.47	0
2015	0	0	0	$8.69	$2.53	0
2016	$8.65	$12.27	$26.73	$8.90	$2.59	0
2017	$9.02	$12.73	$27.55	$9.11	$2.65	0
2018	$9.40	$13.20	$28.39	$9.33	$2.71	0
2019	$9.79	$13.70	$29.26	$9.55	$2.78	0
2020	$10.21	$14.21	$30.15	$9.78	$2.85	0
2021	$10.64	$14.74	$31.07	$10.02	$2.91	0
2022	$11.09	$15.30	$32.02	$10.26	$2.98	0
2023	$11.56	$15.87	$33.00	$10.50	$3.05	0
2024	$12.05	$16.46	$34.00	$10.75	$3.13	0
2025	$12.56	$17.08	$35.04	$11.01	$3.20	0
2026	$13.09	$17.72	$36.11	$11.27	$3.28	0
2027	$13.64	$18.38	$37.22	$11.54	$3.36	0
2028	$14.22	$19.07	$38.35	$11.82	$3.44	0
2029	$14.82	$19.79	$39.52	$12.10	$3.52	0
2030	$15.45	$20.53	$40.73	$12.39	$3.60	0
2031	$16.10	$21.30	$41.97	$12.69	$3.69	0
2032	$16.79	$22.10	$43.25	$12.99	$3.78	0
2033	$17.50	$22.92	$44.57	$13.30	$3.87	0
2034	$18.24	$23.78	$45.94	$13.62	$3.96	0
2035	$19.01	$24.67	$47.34	$13.94	$4.06	0
2036	$19.76	$25.54	$48.66	$14.28	$4.15	$108.93
2037	$20.55	$26.43	$50.03	$14.62	$4.25	$109.84
2038	$21.37	$27.35	$51.43	$14.97	$4.35	$110.77
2039	$22.22	$28.31	$52.87	$15.33	$4.46	$111.72
2040	$23.10	$29.29	$54.35	$15.69	$4.56	$112.70
2041	$24.02	$30.32	$55.87	$16.07	$4.67	$113.70
2042	$24.97	$31.38	$57.43	$16.45	$4.79	$114.73
2043	$25.96	$32.47	$59.04	$16.85	$4.90	$115.78
2044	$27.00	$33.61	$60.70	$17.25	$5.02	$116.86
2045	$28.07	$34.78	$62.40	$17.66	$5.14	$117.96
2046	$29.19	$35.99	$64.14	$18.08	$5.26	$119.10
2047	$30.35	$37.25	$65.94	$18.52	$5.39	$120.26
2048	$31.55	$38.55	$67.78	$18.96	$5.51	$121.45
2049	$32.81	$39.90	$69.68	$19.41	$5.65	$122.67
2050	$34.11	$41.29	$71.63	$19.88	$5.78	$123.92
2051	$35.47	$42.73	$73.64	$20.35	$5.92	$125.20
TOTAL	**$694.31**	**$891.00**	**$1,687.81**	**$507.95**	**$152.61**	**$1,865.60**

Partnership for Liveable Communities, July 2011

The fourth, "Value Capture," reflects projections of property value, retail sales, and taxable lodging activity, along with projections of the share of the growth in underlying land values attributed to the Cotton Belt that can be captured independent of revenue from the tax base.

2.4.1 Cash and Current Commitments

Data provided by The T indicate $272 million in cash and current commitments are already identified, with an additional $415 million requested in the TEX Rail New Starts federal funding application. In addition, tentative commitments for $70 million in station-related infrastructure were identified. These three commitments total $757 million.

2.4.2. Agency Contribution, Farebox and Sales Tax

Agency Contribution: DART has suggested a contribution could be available beginning in 2036. The 2036 value is estimated at $109 million, rising to $125.2 million by 2051. This information is neither firm nor final and is subject to adjustment. In addition, no representations indicate the amounts shown are likely to be available for the purposes described.

Farebox and Fare Structure: To estimate the demand on the proposed TEX Rail line based on a per-mile fare structure, the NCTCOG model development group used the regional travel model for the D-FW region. The transit fare for the Cotton Belt was changed accordingly. NCTCOG's travel demand model was used to create three distance-based ridership and revenue estimates using 10 cents/mile, 14 cents/mile and 30 cents/mile per rider. The modified model setup created new passenger information used in the mode choice model consistent with the new fare structure. The new fare structure removed the traditional free transfer to passenger rail policy and replaced it with a fare-per-mile concept both for first and transferring passengers. Ridership projection changes were estimated for several distance-based rate scenarios, which will benefit from smart card technology implementation. Annual revenue estimates were developed for 2015 (advanced forward to 2016 for consistency) and 2035, with intervening years interpolated. The period from 2036 – 2051 is based on overall NCTCOG regional population forecasts.

The utilization of a digital "smart" card or mobile device for fare collection will provide real time capacity to apply distance/destination-based and customer-type based rates. Smart card technology will substantially increase efficiency and level of farebox recovery. As the Cotton Belt Corridor develops as a linked series of destinations, those revenue sources become increasingly leveraged and complementary. These systematic opportunities provide sustained revenue potential.

Sales Tax: Dedicated sales tax collections from the City of Grapevine through 2015 are included in the Cash and Current Commitments calculation as provided by The T. Projections of Grapevine sales tax after 2015 are driven by inflation. Annual data on 4B sales tax collections from transit agency non-member cities (Colleyville, Coppell, Haltom City, Hurst, North Richland Hills, and Southlake) were aggregated and grown by inflation. The baseline assumption is the Cotton Belt project could access the equivalent of 10 percent of this total beginning in 2013.

2.4.3. Other External Revenue Sources

Advertising, naming rights and potential lease of right-of-way for fiber optic capacity emerged as the most viable secondary net revenue sources.

- Advertising: The Cotton Belt is a "choice rider" opportunity for onboard and station advertising. Its linked ridership potential (with the DFW Airport and the DART light rail system connecting key employment centers) can enhance advertising's value.
- Advertising revenue per rail rider was examined in several comparison cities, with a range of 3 cents to 16 cents per rider. In this analysis, 10 cents per rider is used as a baseline, with the ridership figures associated with average revenue of 14 cents per mile used as the impetus.
- Naming Rights: A domestic transit authority-specific study indicates naming rights (including both individual stations and rail vehicles) could generate approximately $29 million over 20 to 30 years. The estimate is conservative based on other reports (e.g., $3 million for a single station in Philadelphia) but can be used to create a baseline estimate of $1 million per year locally.

Table 9 NON-GEOGRAPHIC REVENUE

$Millions — Note:2.39% Inflation Rate Used

Year	Naming Rights	Advertising	Fiber	Total ($2010)	Total (With Inflation)
2011-15	0	0	0	0	0
2016	$0.80	$0.64	$2.48	$3.92	$4.41
2017	$0.80	$0.65	$2.48	$3.93	$4.53
2018	$0.80	$0.66	$2.48	$3.94	$4.65
2019	$0.80	$0.67	$2.48	$3.95	$4.77
2020	$0.80	$0.68	$2.48	$3.96	$4.90
2021	$0.80	$0.69	$2.48	$3.97	$5.03
2022	$0.80	$0.71	$2.48	$3.99	$5.17
2023	$0.80	$0.72	$2.48	$4.00	$5.31
2024	$0.80	$0.73	$2.48	$4.01	$5.45
2025	$0.80	$0.74	$2.48	$4.02	$5.60
2026	$0.80	$0.75	$2.48	$4.03	$5.75
2027	$0.80	$0.77	$2.48	$4.05	$5.90
2028	$0.80	$0.78	$2.48	$4.06	$6.06
2029	$0.80	$0.79	$2.48	$4.07	$6.23
2030	$0.80	$0.80	$2.48	$4.08	$6.40
2031	$0.80	$0.82	$2.48	$4.10	$6.57
2032	$0.80	$0.83	$2.48	$4.11	$6.75
2033	$0.80	$0.84	$2.48	$4.12	$6.94
2034	$0.80	$0.86	$2.48	$4.14	$7.13
2035	$0.80	$0.87	$2.48	$4.15	$7.32
2036	$0.80	$0.89	$2.48	$4.17	$7.52
2037	$0.80	$0.90	$2.48	$4.18	$7.73
2038	$0.80	$0.91	$2.48	$4.19	$7.93
2039	$0.80	$0.92	$2.48	$4.20	$8.15
2040	$0.80	$0.94	$2.48	$4.22	$8.37
2041	$0.80	$0.95	$2.48	$4.23	$8.60
2042	$0.80	$0.96	$2.48	$4.24	$8.83
2043	$0.80	$0.98	$2.48	$4.26	$9.07
2044	$0.80	$0.99	$2.48	$4.27	$9.32
2045	$0.80	$1.01	$2.48	$4.29	$9.57
2046	$0.80	$1.02	$2.48	$4.30	$9.83
2047	$0.80	$1.03	$2.48	$4.31	$10.10
2048	$0.80	$1.05	$2.48	$4.33	$10.38
2049	$0.80	$1.06	$2.48	$4.34	$10.66
2050	$0.80	$1.08	$2.48	$4.36	$10.95
2051	$0.80	$1.09	$2.48	$4.37	$11.25
Total	**$28.80**	**$30.79**	**$89.28**	**$148.87**	**$263.13**

Partnership for Liveable Communities, July 2011

- Fiber Optic: In Washington D.C., one of the few domestic deployments, fiber optic right-of-way generates approximately $140,000 per rail system mile annually; however, a more modest $50,000 per mile figure is used for the Cotton Belt analysis.

The resulting revenues from these three sources are then reduced by 20 percent with the intent to create a more conservative overall estimate.

2.4.4. Value Capture

2.4.4.1 Tax-Base Portion

The following multi-step process was used to create local tax base forecasts for land adjacent to the Cotton Belt potentially available for enhanced value and proportional commitment to the project:

1. Identify area for development/redevelopment at each station, including location-specific tax rates
2. Create standard places and a land use typology that can be applied to fit the potential development character of each identified station area
3. Estimate the onset and overall timing/duration of development/ redevelopment at each identified station area
4. Apply estimates of taxable value, retail sales, and lodging activity to create a forecast of incremental tax base (including property, sales, and hotel taxes)
5. Apply assumptions regarding macroeconomic variables (inflation and discount rates)
6. Calculate total incremental tax base on an annual basis
7. Apply assumptions regarding capacity for additional value via special assessment districts
8. Apply assumptions regarding jurisdiction/Cotton Belt proportional shares

2.4.4.2 Analysis Methodology

Conduct Parcel-specific Analysis

A parcel-specific analysis of potential areas of influence for each station was conducted. The specific area of influence varied and is unique to each station area. Station areas of influence were determined on a station-by-station and parcel-by-parcel basis. The standard industry practice of identifying a station area of influence by using a one-quarter or one-half mile radius around a potential station was not used, resulting in a more place-specific estimate.

Twenty-seven potential station areas were analyzed, with a catchment area range from 11 acres to more than 1,000 acres. Three stations have been eliminated from inclusion in the initial analysis, leaving 24 station areas for the analysis.

Overall, 9,008 acres (with a 2009 taxable value of $3.126 billion, including agricultural exemptions where applicable) are identified, with the average station area approximately 375 acres. Over the next 40 years, approximately 5,490 (61 percent) acres are estimated to develop/redevelop, with the remaining 3,518 (39 percent) acres unchanged.

Taxable value data for each parcel was gathered through 2009 and was updated for 2010 based on change in overall city taxable property value. 2011 was assumed to be equal to 2010.

Identify Mixed-Use Place Types

A total of six land use/place types mixing different standard land uses (e.g., single-family residential, multi-family residential, retail, office) in various proportions have been created to analyze specific geographic area attributes, creating common place type categories for comparison across the entire corridor. The place types created for the iFi analysis include:

- Transit-Oriented Development (TOD)
- Traditional Neighborhood Development (TND)

- Transition (includes a larger share of single family)
- Retail (includes a mix of land uses, but destination retail is dominant)
- Office (includes a mix of land uses, but employment center office is dominant)
- Suburban Multifamily (SMF) – almost entirely apartment complexes)
- Commercial/Industrial (C&I) not applied to station areas

Each place type assumes a different proportional mix of standard single land uses, (e.g., single-family residential, multi-family residential, retail, office). The mixes are shown in Tables 10 and 11 – first by total square footage, then by square footage per acre. Note: the C&I figures are based on a floor-to-area ratio of 0.2/acre assumption. The place types were developed through a process that included assessment of similar transit markets, the consultant team's professional knowledge of development patterns and markets in the D-FW region, and stakeholder interviews including landowners and developers within the corridor.

Table 10 PLACE TYPES: LAND USE MIX (SQ FOOTAGE DEVELOPED/REDEVELOPED)

Land Uses	TOD	TND	Transition	Retail	Office	SMF	C&I
Single Family	120,000	1,275,000	1,275,000	NA	NA	NA	NA
Multi-Family	1,800,000	750,000	500,000	500,000	500,000	800,000	NA
Office	400,000	150,000	100,000	150,000	750,000	NA	NA
Medical	75,000	100,000	50,000	20,000	150,000	NA	NA
Retail/Enter	100,000	400,000	20,000	500,000	100,000	5,000	NA
Lodging	225,000	112,500	NA	112,500	112,500	NA	NA
Other	NA	NA	NA	NA	NA	NA	NA
Total	**2,720,000**	**2,787,625**	**1,945,000**	**1,282,500**	**1,612,500**	**805,000**	**NA**

Additional Assumptions

	TOD	TND	Transition	Retail	Office	SMF	C&I
Hotel Rooms	250	125	NA	125	125	NA	NA
Acreage	50	200	200	100	100	50	NA

Partnership for Liveable Communities, July 2011

Table 11 SQUARE FOOTAGE OF PLACE TYPES: BY LAND USE MIX (PER ACRE)

	TOD	TND	Transition	Retail	Office	SMF	C&I
Single Family	2,400	6,375	6,375	NA	NA	NA	NA
Multi-Family	36,000	3,750	2,500	5,000	5,000	16,000	NA
Office	8,000	750	500	1,500	7,500	NA	NA
Medical	1,500	500	250	200	1,500	NA	NA
Retail/Enter	2,000	2,000	100	5,000	1,000	100	NA
Lodging	4,500	563	NA	1,125	1,125	NA	NA
Total	**54,400**	**13,938**	**9,725**	**12,825**	**16,125**	**16,100**	**8,712***

Partnership for Liveable Communities, July 2011

Estimate Timing and Duration of Development/Redevelopment

Each station area was evaluated for the extent, timing and duration of development or redevelopment by place type. No new activity is projected to occur within the first five years after commencement of passenger rail service. In some cases, new development will not begin for 20 years. For estimating purposes, if a specific place type at a given station is set to commence in year 10 and takes 15 years to build out, the assumption is growth will occur in consistent increments per year. The analysis duration (and period of value capture) is set at 40 years, beginning in 2011.

Estimate Taxable Value, Retail Sales and Lodging Activity

Taxable property values are estimated using existing appraisal district data, with supplementation from RS Means cost of construction data for 2010 specific to both land use and the region. The range per square foot (outside of commercial/industrial, which is set at $30) is from $95 to $185, which is inclusive of all real (land and improvements) property.

Taxable retail sales reflect an overall average per square foot value and Comptroller data on the share of retail sales subject to sales tax, with a

Table 12 TAXABLE VALUES / SQ. FT.

by land-use type	2010 $
Single-Family Residential	$125-$185
Multi-Family Residential	$95-$145
Office	$145
Retail	$145
Medical	$185
Hotel	$135
Taxable Retail Sales	$144
Hotel Revenue/Room	$85

Partnership for Liveable Communities, July 2011

Table 13 LAND-USE TYPOLOGY FINDINGS ($2010)

Property Type	Developed/ Redeveloped Acres	Share of Development	Avg.Developed Sq. Ft./Acre	Avg. Value / Developed Sq. Ft.	Avg. Developed Value/Acre
TOD	755	8.4%	54,400	$146.16	$7,951,000
TND	990	11.0%	13,938	$134.19	$1,870,313
Transition	1,265	14.4%	9,725	$130.35	$1,275,000
Retail	480	5.3%	12,825	$133.05	$1,706,375
Office	505	5.6%	16,125	$138.72	$2,236,875
SMF	270	3.0%	16,100	$95.31	$1,534,500
C&I	1,195	13.3%	8,712	$30.00	$261,360
Unchanged	3,518	39.1%	NA	NA	$347,008
TOTAL	**9,008**				**$1,453.152**

Partnership for Liveable Communities, July 2011

preliminary estimate of $144 per square foot. Taxable hotel revenue per room reflects average values and occupancy levels in the region and is set at $85.

Tables 12 and 13 outline the results across the entire Cotton Belt Corridor.

Reduce Number of Stations

The analysis assumes approximately 19 stations will be included in the Cotton Belt final alignment depending on several factors. The total number may vary depending on technology utilization, express train management, track configurations, relationship to other rail corridors, and other factors. Rather than arbitrarily eliminating five stations, the analysis uses 80 percent of the values from public value capture to account for reducing the number of stations.

Apply Annual Total Incremental Tax Base

Two scenarios for the proportionate sharing of tax base revenues among local jurisdictions and the Cotton Belt were developed for the analysis. In the first, all incremental growth in taxbase and attendant local tax revenue (property, sales and lodging taxes) is assumed to be shared equally between the local jurisdiction and the Cotton Belt Corridor. In the second, the share is 65 percent jurisdiction and 35 percent Cotton Belt. In addition, a supplemental property assessment of 15 cents per $100 of assessed value is assumed on all acreage within a TOD, with all proceeds being dedicated to the Cotton Belt.

By applying these steps, the annual results of taxbase value capture are presented in Tables 14 through 17.

Stakeholder and partner concerns were expressed during outreach efforts (see Section 5). The primary concern expressed regarded the level of aggregate development projected in this analysis is generally too high by some and too low by others. Specifically, concerns focused on whether the transit-oriented development (TOD) forecasts are overly aggressive. Concerns expressed by others focused on the overall development forecasts as too conservative.

Overall, the TOD place type represents less than 10 percent of the land use analysis (755 acres). This translates into an average of just under 40 acres per station area (assuming 19 stations). This level is comparable to

Table 14 TAX BASE VALUE CAPTURE SCENARIO 1

$Millions

Assumptions: 2.39% Inflation Rate; 35% Facility Share

Year	City	County	Sales	Hotel	Special District*	Total
2011	0	0	0	0	0	0
2012	$0.12	$0.05	0	0	0	$0.17
2013	$0.25	$0.09	0	0	0	$0.34
2014	$0.38	$0.14	0	0	0	$0.52
2015	$0.51	$0.19	0	0	0	$0.70
2016	$1.62	$0.59	$0.09	$0.15	$0.37	$2.82
2017	$2.79	$1.00	$0.18	$0.30	$0.75	$5.03
2018	$4.01	$1.43	$0.28	$0.46	$1.14	$7.32
2019	$5.28	$1.88	$0.39	$0.63	$1.54	$9.71
2020	$6.62	$2.36	$0.49	$0.80	$1.94	$12.22
2021	$8.88	$3.14	$0.72	$1.08	$2.53	$16.36
2022	$11.25	$3.97	$0.95	$1.38	$3.13	$20.67
2023	$13.72	$4.83	$1.19	$1.69	$3.74	$25.16
2024	$16.29	$5.72	$1.44	$2.01	$4.37	$29.84
2025	$18.99	$6.66	$1.71	$2.34	$5.02	$34.71
2026	$21.15	$7.44	$1.96	$2.62	$5.47	$38.64
2027	$23.41	$8.26	$2.23	$2.91	$5.92	$42.73
2028	$25.76	$9.11	$2.50	$3.21	$6.39	$46.98
2029	$28.21	$9.99	$2.79	$3.52	$6.88	$51.40
2030	$30.76	$10.91	$3.10	$3.85	$7.37	$55.99
2031	$32.81	$11.69	$3.33	$4.15	$7.90	$59.88
2032	$34.94	$12.49	$3.58	$4.47	$8.43	$63.91
2033	$37.15	$13.32	$3.83	$4.80	$8.99	$68.09
2034	$39.44	$14.18	$4.10	$5.14	$9.55	$72.42
2035	$41.81	$15.07	$4.37	$5.49	$10.10	$76.84
2036	$43.32	$15.64	$4.58	$5.70	$10.46	$79.71
2037	$44.88	$16.23	$4.80	$5.93	$10.82	$82.66
2038	$46.49	$16.83	$5.02	$6.16	$11.20	$85.70
2039	$48.14	$17.46	$5.25	$6.39	$11.58	$88.83
2040	$49.85	$18.10	$5.46	$6.63	$11.97	$92.01
2041	$51.27	$18.62	$5.59	$6.80	$12.29	$94.58
2042	$52.73	$19.15	$5.74	$6.98	$12.61	$97.21
2043	$54.23	$19.70	$5.88	$7.16	$12.93	$99.91
2044	$55.77	$20.26	$6.03	$7.35	$13.27	$102.68
2045	$57.34	$20.84	$6.18	$7.54	$13.61	$105.52
2046	$58.83	$21.38	$6.33	$7.72	$13.94	$108.21
2047	$60.36	$21.94	$6.48	$7.91	$14.27	$110.96
2048	$61.92	$22.51	$6.64	$8.10	$14.61	$113.78
2049	$63.52	$23.10	$6.80	$8.29	$14.96	$116.67
2050	$65.16	$23.69	$6.96	$8.49	$15.32	$119.62
2051	$66.84	$24.31	$7.12	$8.69	$15.68	$122.65
TOTAL	**$1,286.82**	**$464.30**	**$134.08**	**$166.85**	**$311.03**	**$2,363.08**

*Special District for TOD only at $0.15/$100 assessed valuation

Partnership for Liveable Communities, July 2011

Table 15 TAX BASE VALUE CAPTURE SCENARIO 2

$Millions

Assumptions: 2.39% Inflation Rate; 50% Facility Share

Year	City	County	Sales	Hotel	Special District*	Total
2011	0	0	0	0	0	0
2012	$0.17	$0.07	0	0	0	$0.24
2013	$0.35	$0.13	0	0	0	$0.49
2014	$0.54	$0.20	0	0	0	$0.74
2015	$0.73	$0.28	0	0	0	$1.00
2016	$2.32	$0.84	$0.13	$0.21	$0.37	$3.87
2017	$3.99	$1.43	$0.26	$0.43	$0.75	$6.86
2018	$5.73	$2.05	$0.40	$0.66	$1.14	$9.97
2019	$7.55	$2.69	$0.55	$0.90	$1.54	$13.22
2020	$9.46	$3.37	$0.71	$1.15	$1.94	$16.62
2021	$12.69	$4.49	$1.02	$1.55	$2.53	$22.28
2022	$16.07	$5.67	$1.35	$1.97	$3.13	$28.18
2023	$19.60	$6.89	$1.70	$2.41	$3.74	$34.34
2024	$23.28	$8.17	$2.06	$2.87	$4.37	$40.75
2025	$27.12	$9.51	$2.44	$3.35	$5.02	$47.43
2026	$30.22	$10.63	$2.80	$3.74	$5.47	$52.86
2027	$33.45	$11.80	$3.18	$4.15	$5.92	$58.50
2028	$36.80	$13.01	$3.58	$4.58	$6.39	$64.37
2029	$40.30	$14.28	$3.99	$5.03	$6.88	$70.48
2030	$43.94	$15.59	$4.42	$5.50	$7.37	$76.82
2031	$46.87	$16.69	$4.76	$5.93	$7.90	$82.15
2032	$49.91	$17.84	$5.11	$6.39	$8.43	$87.68
2033	$53.07	$19.03	$5.47	$6.86	$8.99	$93.42
2034	$56.35	$20.26	$5.85	$7.34	$9.55	$99.36
2035	$59.73	$21.53	$6.25	$7.84	$10.10	$105.45
2036	$61.89	$22.35	$6.54	$8.15	$10.46	$109.38
2037	$64.12	$23.18	$6.85	$8.47	$10.82	$113.44
2038	$66.41	$24.05	$7.17	$8.79	$11.20	$117.62
2039	$68.78	$24.94	$7.50	$9.13	$11.58	$121.93
2040	$71.21	$25.85	$7.80	$9.47	$11.97	$126.31
2041	$73.25	$26.60	$7.99	$9.72	$12.29	$129.84
2042	$75.33	$27.36	$8.19	$9.97	$12.61	$133.47
2043	$77.47	$28.14	$8.40	$10.24	$12.93	$137.18
2044	$79.66	$28.95	$8.61	$10.50	$13.27	$141.00
2045	$81.92	$29.77	$8.83	$10.78	$13.61	$144.91
2046	$84.05	$30.55	$9.04	$11.04	$13.94	$148.61
2047	$86.23	$31.35	$9.26	$11.30	$14.27	$152.40
2048	$88.46	$32.16	$9.48	$11.57	$14.61	$156.28
2049	$90.75	$32.99	$9.71	$11.85	$14.96	$160.25
2050	$93.09	$33.85	$9.94	$12.13	$15.32	$164.32
2051	$95.49	$34.72	$10.18	$12.42	$15.68	$168.49
TOTAL	**$1,838.31**	**$663.28**	**$191.55**	**$238.36**	**$311.03**	**$3,242.53**

*Special District for TOD only at $0.15/$100 assessed valuation

Partnership for Liveable Communities, July 2011

Table 16 TAX BASE VALUE CAPTURE SCENARIO 3

$Millions

Assumptions: 2.59% Inflation Rate; 35% Facility Share

Year	City	County	Sales	Hotel	Special District*	Total
2011	0	0	0	0	0	0
2012	$0.13	$0.05	0	0	0	$0.18
2013	$0.27	$0.10	0	0	0	$0.37
2014	$0.41	$0.16	0	0	0	$0.56
2015	$0.55	$0.21	0	0	0	$0.76
2016	$1.69	$0.61	$0.09	$0.15	$0.37	$2.92
2017	$2.89	$1.04	$0.19	$0.30	$0.76	$5.17
2018	$4.14	$1.48	$0.29	$0.47	$1.15	$7.52
2019	$5.45	$1.94	$0.39	$0.64	$1.56	$9.98
2020	$6.83	$2.43	$0.50	$0.82	$1.97	$12.55
2021	$9.16	$3.24	$0.73	$1.11	$2.57	$16.81
2022	$11.61	$4.10	$0.97	$1.41	$3.18	$21.26
2023	$14.17	$4.99	$1.22	$1.73	$3.81	$25.91
2024	$16.85	$5.92	$1.48	$2.06	$4.46	$30.76
2025	$19.66	$6.90	$1.75	$2.41	$5.12	$35.84
2026	$21.94	$7.72	$2.02	$2.70	$5.58	$39.96
2027	$24.32	$8.59	$2.30	$3.00	$6.06	$44.27
2028	$26.81	$9.49	$2.59	$3.32	$6.55	$48.76
2029	$29.41	$10.42	$2.90	$3.65	$7.05	$53.43
2030	$32.12	$11.40	$3.22	$4.00	$7.57	$58.31
2031	$34.33	$12.23	$3.47	$4.32	$8.12	$62.47
2032	$36.63	$13.10	$3.73	$4.66	$8.69	$66.81
2033	$39.02	$14.00	$4.00	$5.01	$9.27	$71.30
2034	$41.51	$14.93	$4.29	$5.38	$9.87	$75.98
2035	$44.08	$15.90	$4.58	$5.75	$10.46	$80.77
2036	$45.77	$16.53	$4.81	$5.99	$10.85	$83.95
2037	$47.51	$17.18	$5.05	$6.24	$11.25	$87.23
2038	$49.31	$17.86	$5.29	$6.49	$11.66	$90.61
2039	$51.17	$18.56	$5.55	$6.76	$12.08	$94.11
2040	$53.08	$19.28	$5.78	$7.02	$12.52	$97.67
2041	$54.71	$19.87	$5.94	$7.22	$12.87	$100.60
2042	$56.38	$20.48	$6.10	$7.42	$13.23	$103.61
2043	$58.09	$21.11	$6.26	$7.63	$13.60	$106.70
2044	$59.86	$21.76	$6.44	$7.85	$13.98	$109.87
2045	$61.67	$22.42	$6.61	$8.07	$14.37	$113.13
2046	$63.40	$23.05	$6.78	$8.28	$14.74	$116.25
2047	$65.17	$23.70	$6.96	$8.49	$15.12	$119.44
2048	$66.99	$24.36	$7.14	$8.71	$15.51	$122.72
2049	$68.86	$25.04	$7.32	$8.94	$15.91	$126.08
2050	$70.78	$25.74	$7.51	$9.17	$16.33	$129.53
2051	$72.74	$26.46	$7.71	$9.41	$16.75	$133.07
TOTAL	**$1,369.46**	**$494.36**	**$141.95**	**$176.55**	**$324.91**	**$2,507.23**

*Special District for TOD only at $0.15/$100 assessed valuation

Partnership for Liveable Communities, July 2011

Table 17 TAX BASE VALUE CAPTURE SCENARIO 4

$Millions

Assumptions: 2.59% Inflation Rate; 50% Facility Share

Year	City	County	Sales	Hotel	Special District*	Total
2011	0	0	0	0	0	0
2012	$0.19	$0.07	0	0	0	$0.26
2013	$0.38	$0.15	0	0	0	$0.53
2014	$0.58	$0.22	0	0	0	$0.81
2015	$0.79	$0.30	0	0	0	$1.09
2016	$2.42	$0.88	$0.13	$0.21	$0.37	$4.01
2017	$4.12	$1.48	$0.27	$0.43	$0.76	$7.06
2018	$5.91	$2.11	$0.41	$0.66	$1.15	$10.25
2019	$7.78	$2.78	$0.56	$0.91	$1.56	$13.58
2020	$9.76	$3.48	$0.72	$1.17	$1.97	$17.09
2021	$13.09	$4.64	$1.04	$1.58	$2.57	$22.91
2022	$16.58	$5.85	$1.38	$2.01	$3.18	$29.01
2023	$20.24	$7.12	$1.74	$2.47	$3.81	$35.38
2024	$24.07	$8.46	$2.11	$2.94	$4.46	$42.04
2025	$28.08	$9.86	$2.50	$3.44	$5.12	$49.00
2026	$31.34	$11.03	$2.88	$3.85	$5.58	$54.70
2027	$34.75	$12.26	$3.28	$4.29	$6.06	$60.64
2028	$38.31	$13.55	$3.70	$4.74	$6.55	$66.85
2029	$42.02	$14.89	$4.14	$5.21	$7.05	$73.31
2030	$45.89	$16.29	$4.59	$5.71	$7.57	$80.05
2031	$49.05	$17.48	$4.95	$6.17	$8.12	$85.77
2032	$52.33	$18.71	$5.33	$6.66	$8.69	$91.71
2033	$55.75	$19.99	$5.72	$7.16	$9.27	$97.89
2034	$59.30	$21.33	$6.12	$7.69	$9.87	$104.31
2035	$62.97	$22.71	$6.55	$8.22	$10.46	$110.91
2036	$65.38	$23.62	$6.87	$8.56	$10.85	$115.28
2037	$67.87	$24.55	$7.21	$8.91	$11.25	$119.79
2038	$70.44	$25.51	$7.56	$9.27	$11.66	$124.45
2039	$73.09	$26.51	$7.93	$9.65	$12.08	$129.26
2040	$75.83	$27.54	$8.25	$10.03	$12.52	$134.17
2041	$78.15	$28.39	$8.48	$10.31	$12.87	$138.20
2042	$80.54	$29.26	$8.71	$10.60	$13.23	$142.34
2043	$82.99	$30.16	$8.95	$10.90	$13.60	$146.60
2044	$85.51	$31.08	$9.19	$11.21	$13.98	$150.97
2045	$88.10	$32.03	$9.45	$11.53	$14.37	$155.46
2046	$90.57	$32.93	$9.69	$11.82	$14.74	$159.75
2047	$93.10	$33.86	$9.94	$12.13	$15.12	$164.15
2048	$95.70	$34.80	$10.20	$12.45	$15.51	$168.67
2049	$98.37	$35.78	$10.46	$12.77	$15.91	$173.30
2050	$101.11	$36.78	$10.74	$13.10	$16.33	$178.05
2051	$103.92	$37.80	$11.01	$13.44	$16.75	$182.92
TOTAL	**$1,956.38**	**$706.23**	**$202.78**	**$252.21**	**$324.91**	**$3,442.51**

*Special District for TOD only at $0.15/$100 assessed valuation

Partnership for Liveable Communities, July 2011

development patterns elsewhere in the D-FW region, specifically along Central Expressway and the Dallas North Tollway. The analysis does not assume growth in value is entirely induced from passenger rail. The analysis assumes value and growth impacts from other transportation facilities contribute to overall property value, including the President George Bush Turnpike and the future Chisolm Trail Parkway. The analysis includes the assumption additional local infrastructure investments provide better connectivity relative to enhanced local access and pedestrian orientation. In the analysis, these factors were projected to enhance growth and development in the corridor.

The focus … is on capturing a share of the growth in underlying land value.

The overall average taxable value of $1.453 million (2010$) per acre across the 9,008 acres is consistent with local experience. The 503 acres around the DART Galatyn Park station (representing a half-mile radius around the Station) had an average taxable value of $1.225 million per acre in 2009 (with an average per acre taxable value of $2.404 million within a quarter mile of the station that same year).

In the aggregate, the area analyzed adjacent to the Cotton Belt is projected to account for 2.11 percent of the population and 1.75 percent of the employment growth over the next 40 years. Ultimately the corridor is estimated to contain 1.00 percent of total regional population, and 1.11 percent of total regional employment in a corridor located through the heart of the Metroplex.

Assuming all elements outlined previously are in place – specifically the regulatory environment, financial capacity for infrastructure, and Cotton Belt operational characteristics – the iFi analysis projections are a plausible forecast of the level of taxable development. This analysis could serve as the basis of

Table 18 SUMMARY OF RESULTS UNDER DIFFERENT SCENARIOS

$Millions

Note: Discount rates are applied to create a present value calculation for each Scenario in Tables 14 – 17

2.39% Inflation Rate	5% Discount; 35% Facility Share	5% Discount; 50% Facility Share	7% Discount; 35% Facility Share	7% Discount; 50% Facility Share
Cash/Current Commitments	$342.00	$342.00	$342.00	$342.00
New Starts (T)	$415.00	$415.00	$415.00	$415.00
Sales Tax				
Grapevine (@ 3/8 cent)	$174.37	$174.37	$123.77	$123.77
4B (@ 10% of collections)	$55.04	$55.04	$40.12	$40.12
DART Contribution	$388.11	$388.11	$214.33	$214.33
Farebox (@ $0.14)	$280.40	$280.40	$191.85	$191.85
Non-Geographic				
Naming Rights	$28.80	$28.80	$28.80	$28.80
Advertising (	$30.80	$30.80	$30.80	$30.80
Fiber Right-of-Way	$89.28	$89.28	$89.28	$89.28
Public Value Capture				
City Property Tax	$352.09	$502.99	$224.19	$320.28
County Property	$126.50	$180.71	$80.41	$114.87
Sales Tax	$35.61	$50.87	$22.32	$31.89
Hotel Tax	$45.09	$64.41	$28.52	$40.74
Special District	$86.31	$86.31	$55.30	$55.30
Land Value	$262.31	$262.31	$262.31	$262.31
TOTAL	**$2,711.71**	**$2,951.40**	**$2,149.00**	**$2,301.34**

2.59% Inflation Rate	5% Discount; 35% Facility Share	5% Discount; 50% Facility Share	7% Discount; 35% Facility Share	7% Discount; 50% Facility Share
Cash/Current Commitments	$342.00	$342.00	$342.00	$342.00
New Starts (T)	$305.00	$305.00	$305.00	$305.00
Sales Tax				
Grapevine (@ 3/8 cent)	$179.71	$179.71	$127.06	$127.06
4B (@ 10% of collections)	$57.14	$57.14	$41.47	$41.47
DART Contribution	$388.11	$388.11	$214.33	$214.33
Farebox (@ $0.14)	$292.96	$292.96	$199.67	$199.67
Non-Geographic				
Naming Rights	$28.80	$28.80	$28.80	$28.80
Advertising	$30.80	$30.80	$30.80	$30.80
Fiber Right-of-Way	$89.28	$89.28	$89.28	$89.28
Public Value Capture				
City Property Tax	$372.23	$531.76	$236.40	$337.72
County Property	$133.81	$191.16	$84.84	$121.20
Sales Tax	$37.45	$53.50	$23.41	$33.45
Hotel Tax	$47.38	$67.68	$29.88	$42.68
Special District	$89.58	$89.58	$57.25	$57.25
Land Value	$262.31	$262.31	$262.31	$262.31
TOTAL	**$2,766.56**	**$3,019.79**	**$2,182.50**	**$2,343.02**

Partnership for Liveable Communities, July 2011

public value capture, as part of an overall Cotton Belt funding effort.

2.4.4.3 Land Value Portion

Value capture is not necessarily limited to tax revenues. Growth in land value and/or shared profits from development are often included as part of the facility financing package in similar projects internationally. The focus for this analysis is on capturing a share of the growth in underlying land value.

Assumptions were made regarding land value as a share of overall developed value per acre for each place type. Based on experience elsewhere and standard practice, the share per acre was set at 10 percent of TOD and 15 percent of TND, Transition, Retail, Office, and Suburban Multifamily (SMF). The Commercial and Industrial place type was not included. The translation yields an overall estimate of average land value per developed acre of $344,290 (2010$) for the 4,295 acres included in the six place types, for a total developed value of $1.478 billion.

The current average land value per acre is approximately $80,000. Assuming $100,000 per acre as a conservative market-based benchmark, the current total land value is approximately $429.50 million. The projected incremental growth along the Cotton Belt Corridor is slightly more than $1 billion.

Assuming the Cotton Belt is able to capture 25 percent of the difference ($1.0492 billion) the value is $262.31 million. This figure is expressed in 2010$ as transactions likely will occur in the near future. No attempt is made to report the estimate in inflated dollars.

SECTION 3

Cost

SECTION 3

Cost

Accurately measuring and predicting in advance the Cotton Belt capital and operating costs to be funded with the iFi approach – and then comparing those projected costs against historic metrics – is a challenge.

Accurate capital costs for the Cotton Belt can be known only when real project bids are solicited and received. Accurate operating cost projections can be known only when providers committing to operate the system have responded to solicitations with guaranteed quotations.

The project focus was not to provide new cost estimates. Rather, the focus was to evaluate two existing capital cost estimates as baselines for input into a financing model.

Currently, The Fort Worth Transportation Authority (The T) has provided a $757 million capital cost estimate for the segment from Sycamore School Road to DFW Airport. The current DART capital cost estimate is $1.2 billion for the segment from DFW Airport to an intersection with the Red Line light rail line.

The T cost estimate is consistent with its final New Starts application. DART identifies the capital cost estimates using a 5 percent completion of preliminary engineering plans method. Capital cost estimates will vary depending on vehicle technology, route, mitigation factors, project phasing, and project delivery efficiencies.

The following considerations should be employed when cost estimates can be advanced to a meaningful refinement:

1. Attractiveness of A Regional Approach and The Resulting Cost of Capital – Should iFi concepts be utilized to fund the Cotton Belt project, strong international interest for participation in the project can be expected.
2. Environmental Mitigation – A strong program of environmental mitigation has been mandated by the City of Dallas, in part so that citizens living and working along the line would not seek to delay or stop the project. By proactively addressing this risk factor, proposed environmental mitigation can prevent a potentially lengthy and expensive public process that stalls the project, thus creating greater certainty for partners, investors and cost planning.
3. Finance, Design, Build, Operate, Maintain (FDBOM) – Transit/ transportation industry leaders (e.g., IMG, Lea+Elliott, etc.) experienced in multiple implementation modes – and both publicly and privately financed systems – have confirmed private or Public Private Partnership (PPP) implementation processes can result in a minimum of 15 percent to 33 percent savings compared to traditional project delivery methods.

Data from the preliminary iFi funding analysis is incorporated into the DART financial model. See Appendix B for background information regarding the DART financial model used for the Cotton Belt Corridor analysis. The information details the input assumptions and results comparing estimated iFi revenues with various cost estimates.

SECTION 4

Corridor and Regional Benefits

SECTION 4

Corridor and Regional Benefits

The Innovative Financing Initiative model presented in this report promises to rewrite the funding paradigm of passenger rail and, potentially, all forms of transportation funding in the D-FW region. The Cotton Belt passenger rail project represents an initial opportunity to advance this new approach.

Under the iFi, each community along the Corridor (and its local business leaders, community leaders and developers) benefits by working collaboratively with other corridor communities. Rather than viewing neighboring communities as competitors, each community has strong incentives to create a united effort to advance corridor economic development comprehensively. The premise is the stronger each individual destination becomes, the stronger the passenger rail corridor and economic system become. By joining forces, communities can maximize development of lasting value benefiting everyone.

In this way, a sufficient level of collective value capture can be achieved within the Corridor to facilitate closing the potential funding gap to implement the Cotton Belt.

4.1 QUALITY OF PLACE AND QUALITY OF LIFE

The iFi concepts use the value base created by sustainable development and the advancement of technology to support leveraged investments in needed transportation infrastructure.

Maintaining vibrant neighborhoods and attracting quality growth are issues currently at the forefront of regional discussions regarding sustaining quality of place and quality of life. The discussion entails a core question: "What will make our community a place that will attract and maintain the best and the brightest employees (and their families, and retirees) who can live anywhere they choose?"

Vision North Texas
Understanding Our Options for Growth

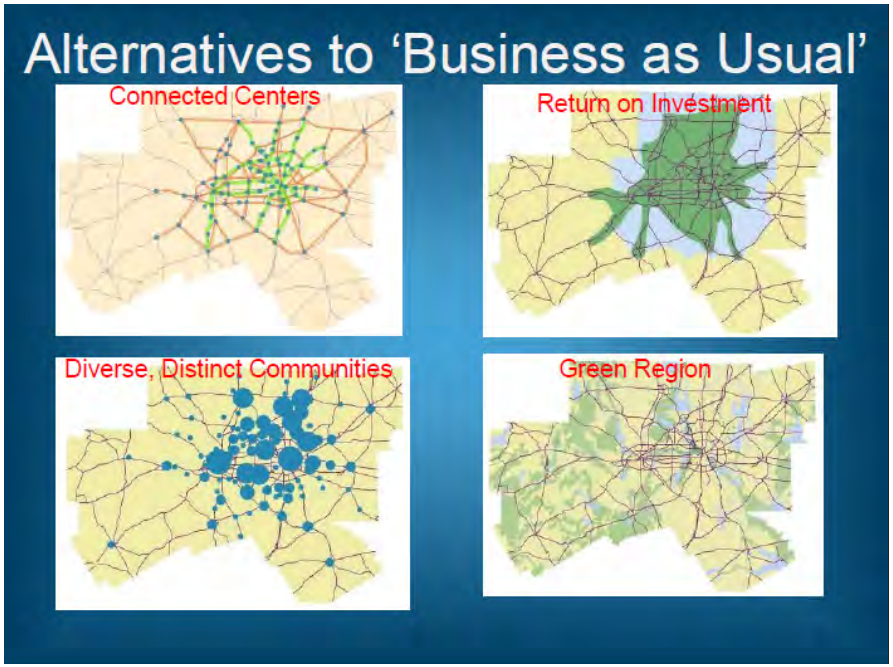
Credit: Vision North Texas

The DFW regional economy has been more resilient than many others around the country. To be sustained, this resilience requires continued quality growth attracted to the region over many decades. Accordingly, the D-FW region has recognized and begun to embrace opportunities to use placemaking principles – including transit-oriented development – to drive sustained economic development. In this context, North Texas community leaders have been working to determine the best approach to manage and attract development to sustain quality of life and fiscal integrity. Vision North Texas and similar initiatives such as those sponsored by NCTCOG's Center of Development Excellence, ask a fundamental question regarding the future: "What kind of growth will sustain the region?" The answer to this question has led communities to consider alternatives to "business as usual." Map 3 provides visual examples of alternatives to "business as usual" in the D-FW region.

By joining forces, communities can maximize development of lasting value benefitting everyone.

Vision North Texas has resulted in the development of a set of eight guiding principles:

1. Create places of lasting value



Map 3 Alternatives to 'Business As Usual'
Credit: Vision North Texas

2. Attract the economy of the future
3. Build for the new markets
4. Maximize return on infrastructure investment
5. Invest in open spaces
6. Enhance local sustainability
7. Align plans with regional plans
8. Build partnerships for local and regional success

4.2 THE CHARACTER OF GROWTH

The Vision North Texas principles respond to the concept of sprawl. Whether one believes sprawl is good, bad or just a fact of American life, two types of sprawl should be considered. Michael Lewyn (a Florida law professor who teaches a seminar on sprawl and the law, and is a frequent lecturer on growth and why it occurs) explains the distinction as follows:

> "Where we grow"- Sprawl is movement from the core to the fringe of a region.
>
> "How we grow"- Sprawl is development oriented towards drivers, as opposed to development oriented toward mobility choices -- driving, transit, cycling and walking.
>
> Some new development meets both definitions: A car-oriented development 20 miles from downtown fits both definitions of sprawl." But a New Urbanist development in an outer suburb (such as Austin Ranch in the Colony) is sprawl in the first sense (where) but not in the second (how). On the other hand, in car-oriented cities like Atlanta and Jacksonville, there are car-oriented neighborhoods built in the 1940s and 1950s – some as few as four or five miles from downtown. These places are sprawl in the second sense (how) but not in the first (where).

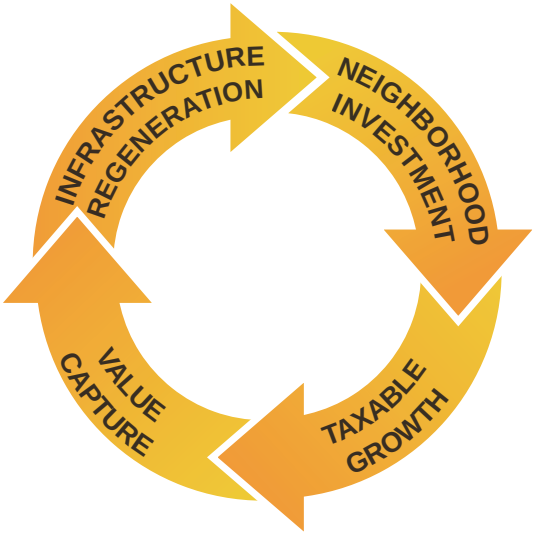
The distinction of the "how," versus the "where," of sprawl is important. While communities debate the location of new growth or whether to support central city redevelopment (the "where"), they often lose sight of the character of growth that does occur (the "how").

The iFi concepts provide an opportunity to implement the eight Vision North Texas principles. The character of growth not only provides a great quality of life for this generation, but also creates the sustainable capacity to invest in regional infrastructure to carry forward the eight principles for future generations.

4.3 THE VIRTUOUS CIRCLE

Tax base value capture is the primary iFi tool that links sustainable development to infrastructure investment in a neighborhood or employment center. Tax base value capture leverages a type of complex economic growth that creates its own positive, self-sustaining feedback loop, known as a "virtuous circle."

To begin, a community will provide a certain level of public investment in a neighborhood (e.g., a passenger rail station and zoning for surrounding transit oriented development). The investment supports the capacity to maintain and grow the tax base over time. This tax base growth, in turn, provides the ongoing capacity for infrastructure regeneration necessary to sustain and grow the neighborhood.



Under the iFi concepts, such infrastructure regenerative investment is married with good planning to meet Vision North Texas' first guiding principle, "create places of lasting value."

The value capture concept is based on the premise that with each infrastructure investment – typically transportation – some marginal improvement or marginal decline occurs in the surrounding land character and resulting development value. This transportation-related value change can be measured in two ways. First, the value of a parcel and improvements can be assessed due to a change in access, noise, aesthetics, safety, reliability or other transportation impact. Second, the impact on the transportation system can be measured from the development context that is set up to harness the transportation facility such as a transit station or a roadway interchange.

For example, a passenger rail station or highway interchange's first effect is a property value increase due to access, reliability and safety. The private sector then responds with an investment in a walkable, mixed-use village. The second effect is the reduced demand for commuter/regional transportation infrastructure (e.g. new highways) as a result of people living, working, shopping or otherwise enjoying life closer to home, in a mixed-use village (where sidewalks and bike lanes may be the primary new transportation infrastructure needed). This development pattern redirects vehicle trips to transit person-trips or shorter driving trips. The marriage of an integrated transportation system with a mixed-use village reduces vehicle trips. These trips would have caused more congestion, increased travel times and created greater wear and tear on the transportation system – as well as adding commuting time and stress that erodes quality of life.

The marriage of an integrated transportation system with a mixed-use village reduces vehicle trips.

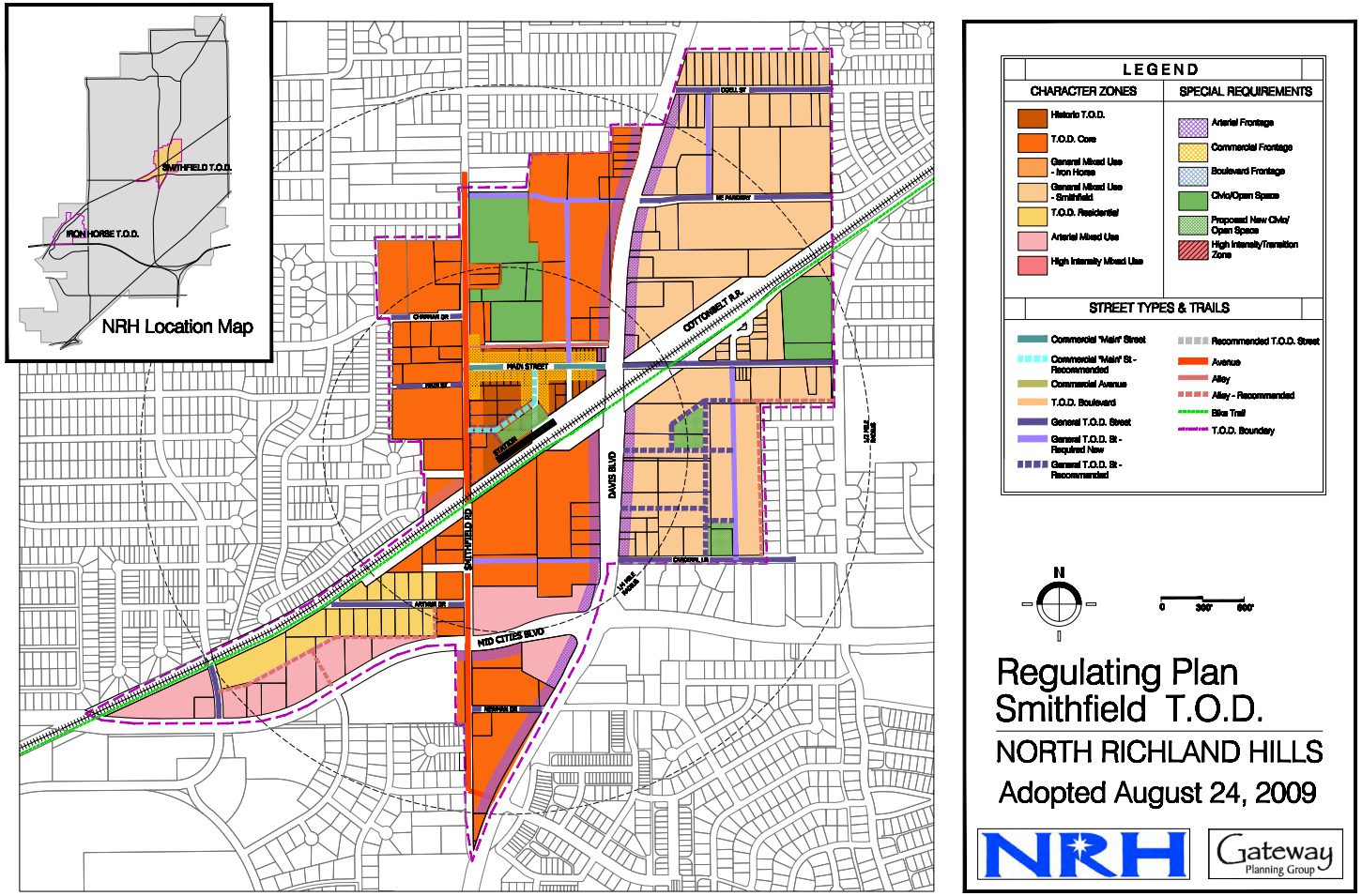
The increased tax base increment resulting from the integration of transportation and land development can be harnessed for reinvestment in the mixed-use village. A portion of tax revenues may be dedicated to support the increased investment needed in public infrastructure – such as building connecting streets and public spaces that link to surrounding single family neighborhoods.

In addition, the revenue from the captured value can also be committed to supporting other transportation investments that make the value capture concept possible. Common tools for value capture are Tax Increment Financing (TIF) Districts, Public Improvement Districts (PID), and Development Agreements.

4.4 LINKING PLACEMAKING AND TAX BASE GROWTH FOR VALUE CAPTURE

A relevant regional example includes an urban village planned for the Cotton Belt Corridor (Smithfield Station Transit Oriented Development, City of North Richland Hills). This example offers guidance for implementing the virtuous circle of value capture.

The future Smithfield Station area in North Richland Hills (as shown in Map 4) has been repositioned through form-based zoning. Like the virtuous circle of value capture, this community used the impending passenger rail service as a policy driver for a more intensive development orientation, through form-based coding. At the same time, the form-based coding will make it possible



Map 4 Smithfield Station TOD, City of North Richland Hills

Credit: Gateway Planning Group

for the developers to realize places of lasting value within the Smithfield Station area. This linkage of placemaking for lasting value and resulting tax base growth positions Smithfield for a TIF District to facilitate value capture.

A second example is the emerging development around the potential Cotton Belt interchange with the DART Bush Turnpike Station in Richardson. Planning and form-based rezoning has occurred for an urban village to support a TIF District for value capture at the Bush Central Station.

4.5 PLACES OF LASTING VALUE AND INNOVATIVE FUNDING

The iFi assumes sustainable development patterns – with a focus on well-designed places of lasting value – will be encouraged at the preponderance of passenger rail station areas. Sustainable development implementation will enable significant land development and redevelopment associated with the corridor to provide capacity for sustained value capture.

The particular development pattern for a given station area will vary among the set of place types described in Section 2. Regardless the scale and type of development, the resulting development for any given location will be enhanced as places of lasting value arise through a coordinated planning effort.

One approach to achieve places of lasting value is through a form-based code. Because a form-based code defines development character with a primary focus on urban form, rather than use. Form-based codes ensure buildings, streets, and public spaces complement one another, regardless of individual building uses. Therefore form-based codes enable land uses to be mixed – in buildings that help create an appealing, walkable, human-

scaled place – and for buildings and sites to evolve over time, to realize a long-range plan. The potential Smithfield Station area in North Richland Hills and the land around the potential station at the Bush Central Station in Richardson both have been repositioned through form-based zoning.

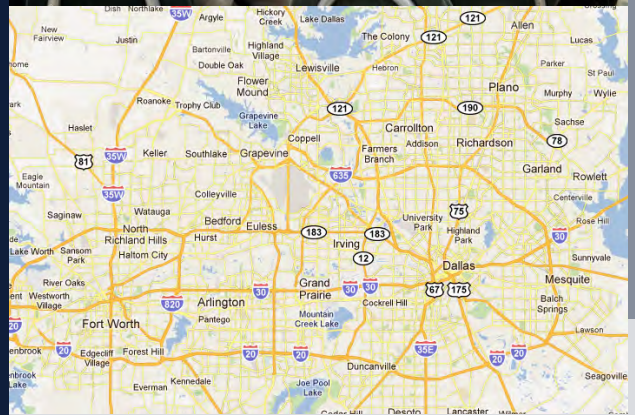
The overarching benefit of this development orientation, from station area to station area, will be a linked series of markets that can be accessed conveniently by passenger rail. As destinations become linked along the Cotton Belt, and then linked within a larger regional network of passenger rail facilities, choice riders will be increasingly attracted to the regional passenger rail system.

The overarching benefit... will be a linked series of markets that can be accessed conveniently by passenger rail.

The increasing system ridership (e.g., more consumers, workers, and homebuyers with access to all Cotton Belt destinations) will make development in the respective station areas more attractive. This ever-increasing linkage of choice ridership and attractive destinations of lasting value, in turn, increases the value-capture potential for both local and regional infrastructure in each respective community.

Ultimately, an innovative approach provides the opportunity to extend coordinated development of lasting value along multiple corridors within the D-FW region. The recently adopted NCTCOG Mobility 2035 Long Range Transportation Plan (Mobility 2035) includes a goal of encouraging “livable communities which support sustainability and economic vitality.” This goal was contextually critical to the decision to remove approximately $50 billion in roadway funding from the Mobility 2030 plan. Innovative funding initiatives provide the opportunity to increase local transportation funding levels in future Mobility plans.

As reflected in Vision North Texas, the D-FW region desires a new approach to growth through a focus on places of lasting value. As reflected in Mobility 2035, the D-FW region desires to move forward realistically with a balanced transportation investment linking sustainable development to transportation. Innovative funding initiatives will allow communities along the Cotton Belt to achieve this goal.



SECTION 5

Outreach: Stakeholders and Partners

SECTION 5

Outreach: Stakeholders and Partners

SUMMARY

Regional collaboration and participation across many jurisdictions and agencies is at the heart of the iFi for the Cotton Belt passenger rail corridor. Phase 1 included efforts to inform, engage and listen to key stakeholders and partners.

The iFi concepts identify a new way of doing business in North Texas. Stakeholder and partner outreach was focused on fostering understanding, describing the mechanics of various revenue streams, refining those revenue stream projections and helping local leaders understand the advantages and impacts of participating in funding the Cotton Belt project.

As a result of stakeholder and partner dialog, representatives from all key stakeholder groups understand the core iFi concepts. Stakeholders and partners understand the potential benefits and challenges for corridor communities associated with funding and creating a 62-mile sustainable corridor, with the power to attract population increases, substantial business/economic growth and innovative investments. Participants support efforts to develop a new strategy for funding the passenger rail corridor that harnesses the power of economic development and growth over the next 40 to 50 years.

All along the corridor, the iFi team worked to build support for a successful project that is sensitive to the issues and concerns of municipalities, counties, transit agency partners, property owners and developers.

To help build understanding and support among key stakeholders – and to gather input and ideas – Phase 1 included a range of outreach events. Phase 1 focused on communication with transit agencies' leadership, municipalities, counties and universities along the corridor, and key property owners and developers at potential station locations. Key events included group and individual meetings. Group meetings were conducted to present introductory, general update and status information. Individual meetings focused on providing local leaders with updated information and discussing details about property values and station areas in specific communities.

The iFi concepts identify a new way of doing business in north Texas.

5.1 CORRIDOR-WIDE GROUP MEETINGS

5.1.1 Advancing Rail in North Texas – Core Stakeholder Team

Participants included representatives of major entities including cities, regional governments, transit agencies, universities, homeowners' associations, coalitions, state representatives, and others.

September 3, 2010
76 participants

December 17, 2010
86 participants

5.1.2 City Managers Briefing

Participants included city managers from the municipalities along the corridor and county officials.

February 15, 2011
35 participants

5.1.3 Regional Transportation Council Workshop

Participants included Regional Transportation Council representatives.

May 12, 2011
75 participants (estimated)

5.2. CITY, COUNTY AND STATION AREA MEETINGS

Participants included city officials from individual cities, county officials, and property owners and developers from proposed station areas.

5.2.1 Round One

September 2010 to January 2011
28 meetings, estimated 120 total participants

5.2.2 Round Two

March to April 2011
22 meetings, estimated 110 total participants

As anticipated, cities want to ensure passenger rail adds value to their community. City leaders expressed a need to keep a substantial portion of property value tax growth for necessary local infrastructure and costs of service. The property owners near proposed rail stations understand the potential for significant property value benefits, over the coming decades. Land developers and property owners have concerns about impacts from the construction phase and subsequent Cotton Belt operation.

5.3 CORRIDOR-WIDE GROUP MEETINGS

5.3.1 Advancing Rail in North Texas Meetings

5.3.1.1 September 3, 2010

The iFi project was introduced to the corridor stakeholder group. Handouts included an agenda, copies of presentations, a fact sheet, frequently asked questions sheet, and Cotton Belt Corridor map.

Agenda

The agenda included several topics related to rail in North Texas. These included updates on rail studies under way with The T and DART, and discussions with the Federal Railroad Administration regarding use of a new vehicle for passenger trains in this region.

The meeting began the iFi effort with attendees introduced to the project. The presentation explained the iFi process and schedule, and informed participants that stakeholder discussions will occur throughout the effort.

Information presented included the following:

- There are no predetermined outcomes from the project. The effort intends to look at a range of funding strategies to determine which have the most potential.
- The goal is to develop a viable, integrated funding plan to pay for Cotton Belt construction, operation and maintenance.
- Ultimately, the transit agencies in the region must approve the funding plan, as those agencies will need to implement the financing strategies.
- The iFi sets up a new business model for capitalizing rail funding requiring regional ownership.
- The iFi proposes a new dynamic for creating funding for transportation projects and could set a precedent for the entire country.

5.3.1.2 December 17, 2010

Handouts included an agenda, presentation copies, and an updated Cotton Belt Innovative Finance Initiative fact sheet.

The meeting purpose was to update participants on the iFi status, describe the potential for economic development and population growth in the Cotton Belt Corridor and in North Texas associated with implementing passenger rail service, and provide an update regarding legislative needs to implement a financing plan.

Information presented noted the need to make policy decisions related to the funding effort, including investigating fair fare policies, determining a possible project financing structure and identifying how smart card fare collection technology can enhance customer service levels.

Comments were made regarding:

- Whether the region has the ability to provide a backstop revenue source
- Support for the region pulling together to make the process work
- The full commitment being made by DART to this effort, and thinking creatively

5.3.2 City Managers: Group Briefing

5.3.2.1 February 15, 2011

Handouts included an agenda, Cotton Belt Innovative Finance Initiative fact sheet, a map of existing and proposed passenger rail corridors in North Texas, a document explaining the factors involved in analyzing the property value capture revenue source and an explanation of transit fare-box revenue enhancements.

The meeting purpose was to provide attendees with a more in-depth view of how the consultant team is analyzing potential revenue sources. In addition, other activities likely to have an impact on capital costs for building passenger rail in North Texas, and/or operating and maintenance costs were discussed. These included providing backstop revenues through toll revenues; recruitment efforts to lure a rail vehicle manufacturer to the region; and smart card fare collection technology.

Information was presented by the consultant team on the capital and operation costs, and major viable revenue streams. The mechanism of value capture was explained, as was the type of contracting authority that would be required to implement financing.

Issues raised by attendees included operational details, tax sharing, equity between transit agency member and non-member cities, and assurance that cities would have sufficient resources to build infrastructure associated with the passenger rail system.

5.3.3 RTC Workshop

5.3.3.1 May 12, 2011

Preliminary iFi findings were presented to the Regional Transportation Council.

Considerable discussion took place at the workshop regarding how Phase 1 has provided sufficient evidence that the ability exists to pay back an investor. The NCTCOG Director of Transportation, Michael Morris, asserted that general viability had been demonstrated for the iFi.

Group discussions also focused on the issues of when Phase 1 officially ends and Phase 2 begins, when elected officials from the cities along the corridor would be brought into the discussions and when negotiations would begin with cities in earnest. It was emphasized that such negotiations were better suited for Phase 2.

It was noted a key aspect is sensitivity of information regarding the property near station areas. Discussing station area details in a public setting could lead to real estate speculation. Therefore, it is preferred to coordinate discussions with transit agency boards and city councils via executive sessions or through other methods to protect the real-estate-based matters. This will be critical as Phase 2 discussions begin and local governments negotiate the details of participation in the Cotton Belt project.

5.4 CITY, COUNTY AND STATION AREA MEETINGS

5.4.1 Round One

The first series of meetings took place between September 2010 and January 2011. They included:

Table 19 STAKEHOLDERS MEETINGS: ROUND ONE

Entity	Date
DFW International Airport	9/14/10
Coppell	9/28/10
Addison	9/28/10
DCTA	9/28/10
Plano	9/29/10
Fort Worth	10/4/10
North Richland Hills	10/4/10
Hurst	10/6/10
Dallas	10/6/10
Richardson	10/7/10
Grapevine	10/7/10
Carrollton	10/7/10
Irving	10/11/10
Farmers Branch	10/11/10
Southlake	10/12/10
Colleyville	10/12/10
Watauga	10/14/10
Bank of America (Pate and Caruth Trusts – Summer Creek and Richardson stations)	10/25/10
Legacy Capital (Summer Creek Development)	10/27/10
Texas A&M	11/4/10
DFW International Airport	11/5/10
Collin County	11/9/10
Dallas County	12/13/10
City of Plano (TIF)	12/16/10
Realty Appreciation	1/5/11
Mercantile Partners (Beach Street Station)	1/6/11
City of Grapevine (TIF)	1/6/11
Billingsley Trust	1/7/11

5.4.1.1 Attendees

Meetings with cities and counties included city and county managers, city finance directors, planning staff and any other personnel deemed appropriate to attend.

Handouts at the meetings included an agenda, a Cotton Belt Innovative Finance Initiative (iFi) fact sheet, a Cotton Belt iFi FAQ sheet, and a proposed stakeholder meeting schedule.

5.4.1.2 Meeting Purpose

The purpose of initial individual stakeholder meetings was to help differentiate the iFi effort from other transit agency passenger rail projects; explain the iFi process and answer questions; and, most important, gather feedback.

5.4.1.3 Information Presented

Meetings provided updates on rail projects under way with The T and DART, explained iFi's background, process and details, obtained feedback from city, county or agency staff, property owners and developers. They also described the next steps to be taken by the iFi team.

5.4.1.4 Feedback & Concerns

General support for the concept of building the Cotton Belt was voiced, with the caveat in some locations that full support would be dependent on the details of how cities or counties would be involved, and what would be required. The issue of making participation of cities equitable, in terms of member versus nonmember cities, is critical for garnering support.

5.4.2 Round Two

The second series of stakeholder meetings took place in March and April 2011.

5.4.2.1 Attendance

Participants included city managers, city finance directors, planning staff and any other city personnel deemed appropriate to attend.

Table 20 STAKEHOLDERS MEETINGS: ROUND TWO

Entity	Date
Southlake	3/22/11
Collin County	3/22/11
Carrollton	3/23/11
Addison	3/23/11
Coppell	3/29/11
North Richland Hills	3/29/11
Haltom City	3/29/11
Dallas County	3/30/11
Dallas	3/30/11
Hurst	3/30/11
Dallas Fort Worth International Airport	4/4/11
Bank of America (Pate and Caruth Trusts – Summer Creek and Richardson stations)	4/4/11
DCTA	4/4/11
Tarrant County	4/4/11
University of Texas Dallas	4/8/11
Parliament Group (PGBT Station)	4/12/11
Legacy Capital (Summer Creek and McPherson Ranch developments)	4/12/11
Richardson	4/13/11
Plano	4/21/11
Grapevine	4/21/11
Fort Worth	4/22/11
Texas A&M	4/22/11

Handouts included meeting discussion topics/agenda; maps showing proposed station areas of influence; property-type categories; and station area tax base and property valuation information. Maps showing existing land uses at station areas were distributed at some meetings.

5.4.2.2 Project Background/Meeting Purpose

The purpose of the second round of stakeholder meetings was to provide a project update and to allow participants the opportunity to examine land use assumptions and tax base information and provide comments.

5.4.2.3 Information Presented

Information provided to meeting participants consisted of an update on paring the list of funding streams, and categorizing revenue sources as either geographic or non-geographic. An explanation regarding the value capture revenue source was provided, along with details about how station areas in each community could contribute. This involved discussing station area maps depicting associated areas of influence and local tax structures.

5.4.2.4 Feedback

All cities provided confirmation of tax rates and several suggested changes to the station areas of influence. More information was requested regarding assumptions used for tax amounts presented, and what other entities are likely to be asked to participate. The equity issue was discussed as was the desire to leave cities with a portion of any increased tax revenues to pay for associated local infrastructure improvements.

5.5 CONCLUSION

External stakeholder discussions have been critical for helping local leaders understand the potential for raising revenue through innovative methods. The meetings have provided a forum for explaining how value capture would work and how technology can be used to increase the amount of revenue recovered through the farebox. Extensive efforts have been made to communicate with city and county staff, and individual property owners throughout this initial project phase. Communication opportunities will continue through future project phases.

EPILOGUE

Taking Charge of Our Future

Taking Charge of Our Future

Ron Natinsky *and* **Jungus Jordan** *The Regional Transportation Council (RTC)*

The Cotton Belt – a single rail corridor – is the specific focus of this initiative. But the transportation funding implications of the iFi transcend this corridor. They are larger even than the entire D-FW region. Indeed, the region is poised to lead the way for the nation.

These are frustrating times. Governments of all types are out of money and lack the ability to finance new initiatives. But as a nation, the United States and its major metropolitan areas face global economic competition unprecedented in history. Thus, despite the fiscal crisis, we cannot simply idle, hoping for funds from an outside source, hoping the economy improves. If we are to continue prospering, and to meet the present economic challenge, we must invent new methods for sustaining our region's well-being.

Leaders in the D-FW region recognized the broad and enduring shortage of transportation infrastructure funds, as well as the immediate need to provide mobility (travel between home, work, and other destinations) and accessibility (linking destinations to one another).

Infrastructure creates access. Access increases the ability to deliver sustainable development. Sustainable development induces value creation. Value can be harnessed to fund infrastructure. The iFi palette includes a bold, decisive form of value capture – one that does not sit passively by, hoping value will be created. Rather, in true Texas fashion, it actively controls our destiny by creating economic value, both public and private. That value in turn can be leveraged to pay for needed new infrastructure – completing the "virtuous circle."

The Innovative Finance Initiative:

- Is a solution
- Is about defining and implementing new funding capacity for building transportation infrastructure to support future growth and economic development
- Does not create or impose new taxes
- Taps the local value created by passenger rail and complementary street networks, connected to a regional multimodal transportation network
- Captures a portion of the value that it is responsible for creating
- Finances the initial asset, by capitalizing future value
- Sets in motion a process of regional value creation: jobs, property values, quality of place, quality of life and a resulting sustainable tax base – all within the boundaries of the new economic reality

We must invent new methods for sustaining our region's well-being.

Upon implementation, fiscally measurable benefits accrue to:

- The private sector, as a basis for property and business development
- The public sector, as a sustainable system for fiscal stability and growth
- Citizens, who gain enhanced transportation choices, accessibility, great destinations and quality of life

Cities, counties and transportation entities that participate in iFi are not imposing new taxes on their citizens. They are enhancing the basis for future economic growth. Bluntly put, the existence of passenger rail service (anchoring sustainable development) will provide a competitive advantage for participating jurisdictions over others, within the region and throughout the world, for attracting new companies and investment as well as attracting new residents.

Integrating those economic strengths through passenger rail service will result in economic synergies far greater than the sum of their parts.

Through the iFi, diverse economies in manufacturing, energy, research, banking, medicine, technology, and more can be linked in ways that can sustain our communities. Integrating those economic strengths through passenger rail service will result in economic synergies far greater than the sum of their parts.

Let us not wait for the federal or state government to act. It is time to put ourselves back in charge of our own futures. We can begin now by leading the reinvention of transportation funding in the United States.

No one else will do it for us. No one else can.

APPENDIX A

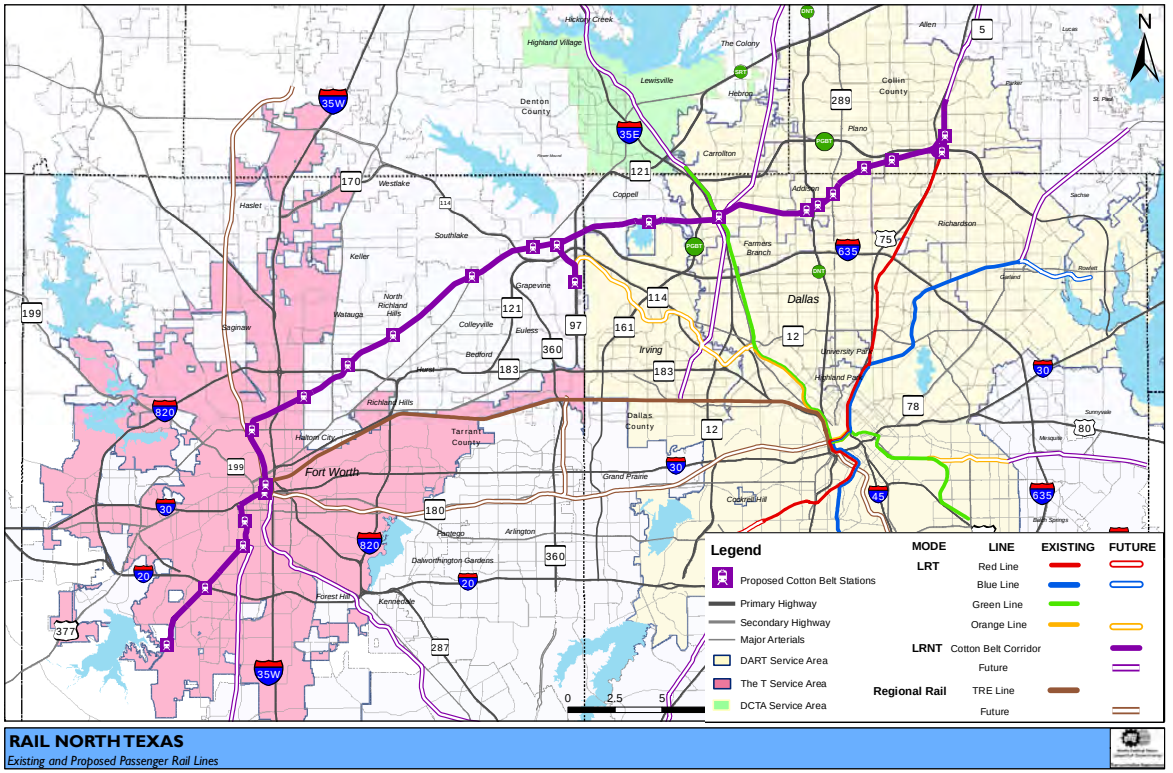
Station Area Maps and Associated Data

Station Area Maps and Associated Data

The iFi effort reviewed all proposed station areas on an individual basis. The individual station area analyses were conducted primarily for the land value capture revenue component. These analyses were then aggregated to values representing the entire 62-mile corridor. In addition, two additional stations were analyzed – one each at the corridor's western (Station #1, McPherson Station) and eastern (Station #27, Shiloh Road Station) termini.

Each station area map depicts an approximate proposed station location with a green dot. The proposed Cotton Belt Corridor is indicated with an orange line on the aerial map. The summarized station area analyses are documented in the tables following each station location identification map. These tables provide information for various criteria and are generally indicated in acres and years where appropriate, unless otherwise noted.

For analysis purposes, the project is anticipated to open in 2015 with the first full year of operation in 2016. The analysis begins with year 2016. Years identifying anticipated development commencement and duration are calculated beginning with the first full year of revenue service, 2016.



The Cotton Belt Corridor is shown in purple, with proposed passenger rail stations.

McPherson Station Area

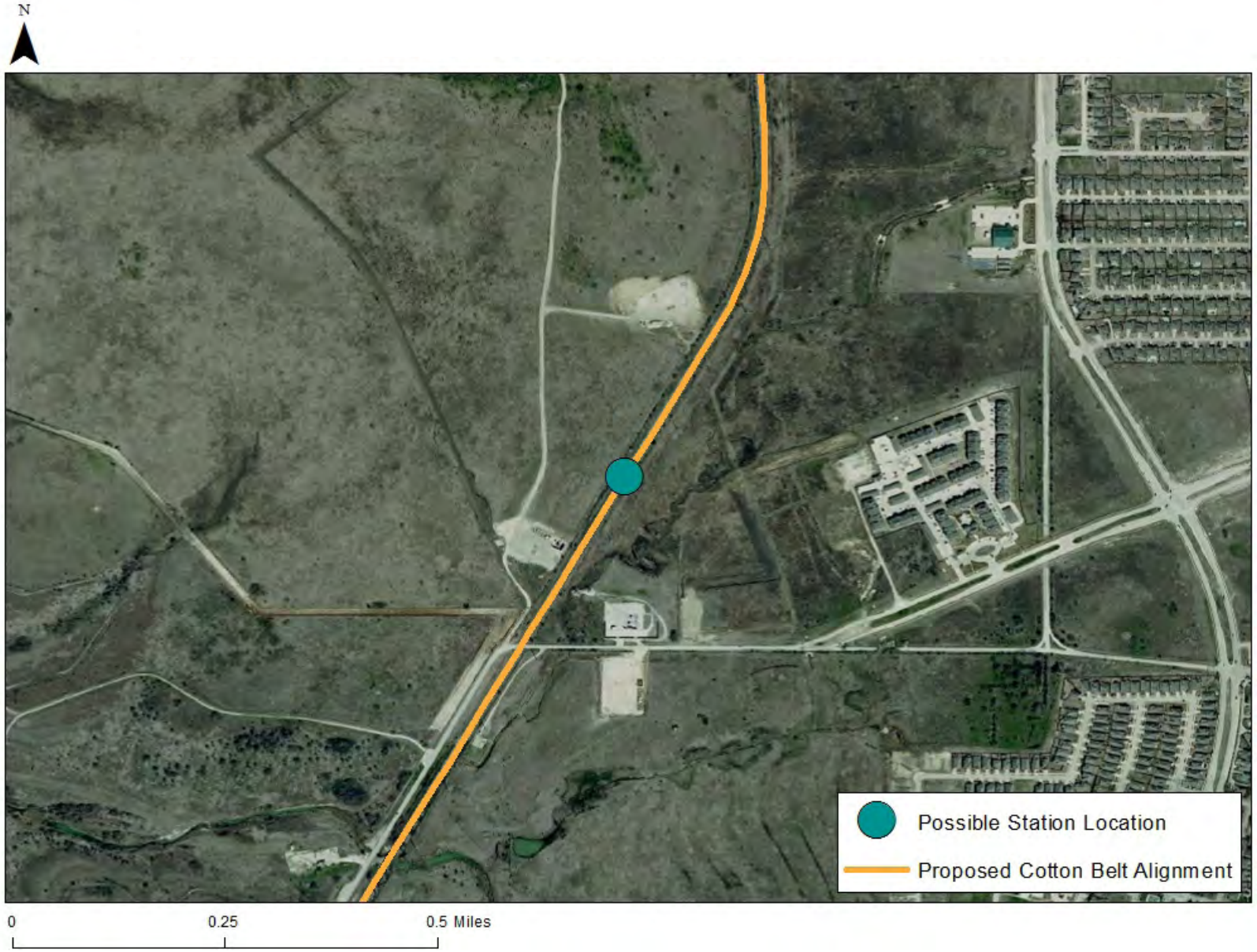
McPherson Station Area (#1)

Station Area Acres	932
2009 Property Value	$9,257,002
Change in City Property Value 2009 to 2010	-3.7%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	3%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	30
TND	200
Transition	500
Retail	40
OffMF	0
C&I	0
Other	0
TOTAL	790

Development/Redevelopment Begins	
TOD start	10
TND start	10
Transition start	10
Retail start	10
Office start	15
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	10
TND duration	10
Transition duration	10
Retail duration	5
Office duration	5
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	84.8%
Total New Population	17,110
Total New Employment	5,945

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Sycamore School Road / Summer Creek Station Area



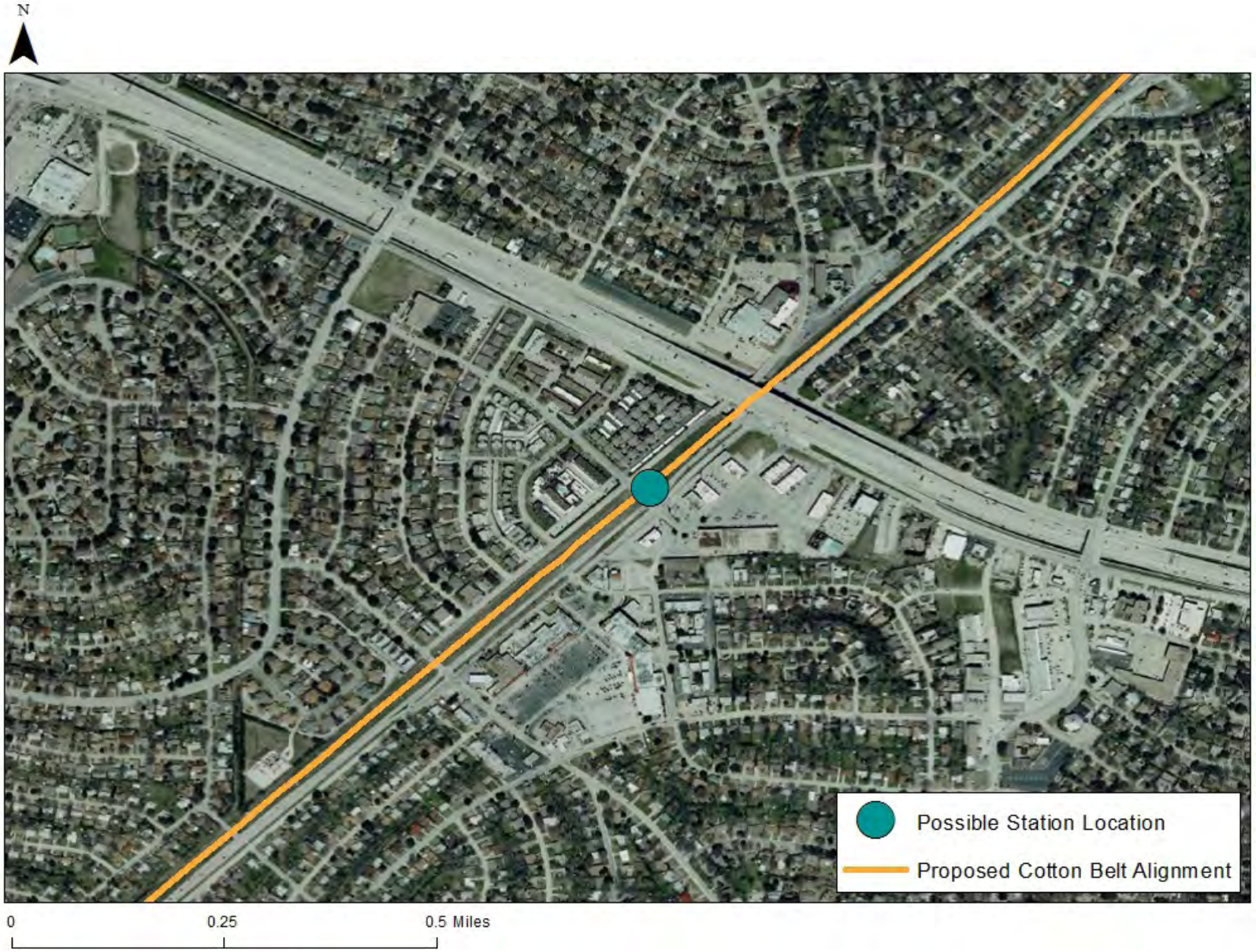
Sycamore School Road / Summer Creek Station Area (#2)

Station Area Acres	1,238
2009 Property Value	$26,442,029
Change in City Property Value 2009 to 2010	-3.7%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	4%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	50
TND	300
Transition	500
Retail	30
Office	10
SMF	0
C&I	0
Other	0
TOTAL	890

Development/Redevelopment Begins	
TOD start	5
TND start	10
Transition start	10
Retail start	5
Office start	5
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	15
TND duration	10
Transition duration	10
Retail duration	5
Office duration	5
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	71.9%
Total New Population	20,761
Total New Employment	7,118

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

I-20 / Granbury Station Area



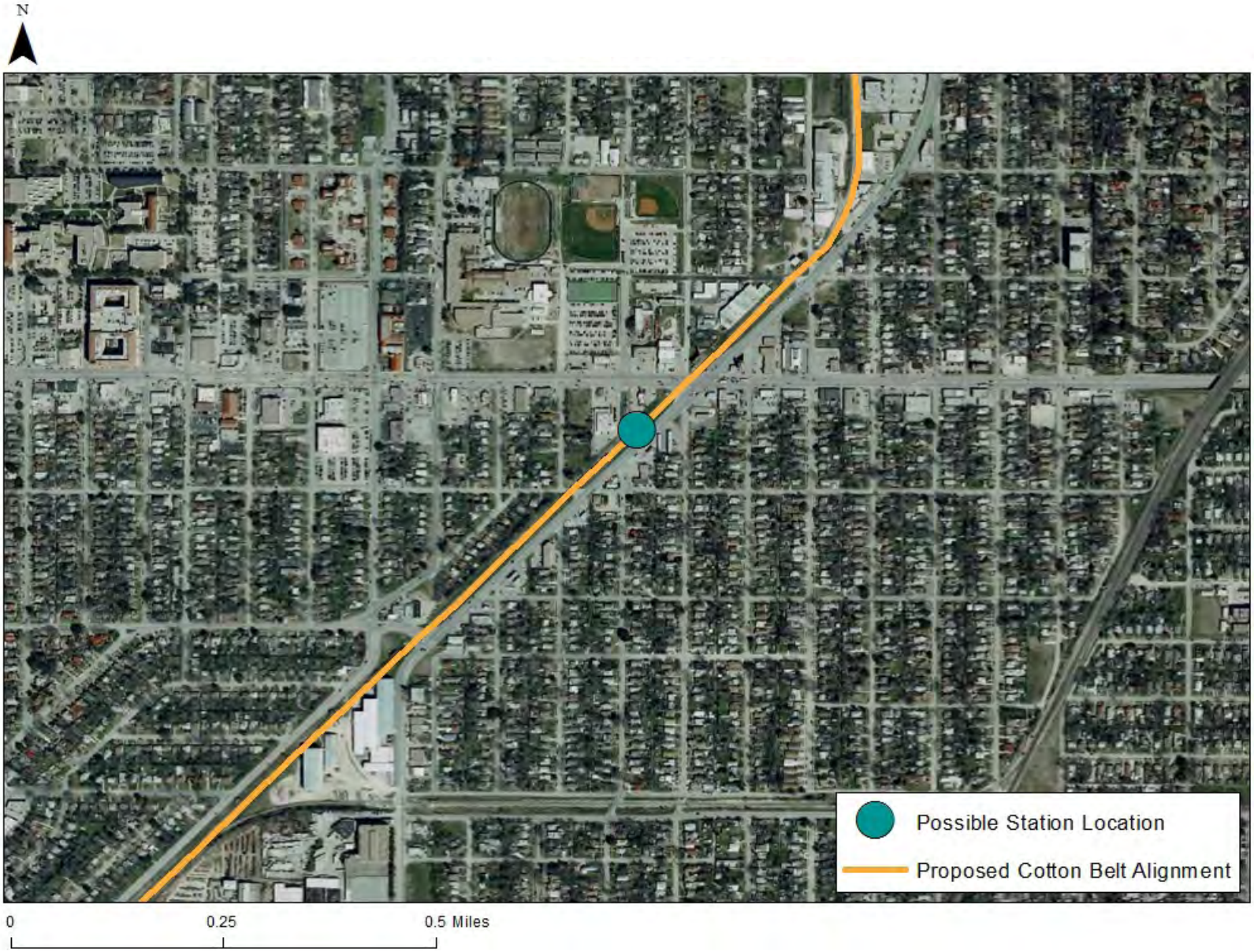
I-20 / Granbury Station Area (#3)

Station Area Acres	106
2009 Property Value	$40,841,380
Change in City Property Value 2009 to 2010	-3.68%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	28%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	30
TND	30
Transition	0
Retail	0
Office	0
SMF	0
C&I	0
Other	0
TOTAL	60

Development/Redevelopment Begins	
TOD start	15
TND start	15
Transition start	0
Retail start	0
Office start	0
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	10
TND duration	10
Transition duration	0
Retail duration	0
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	56.6%
Total New Population	3,185
Total New Employment	1,518

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Berry / TCU Station Area



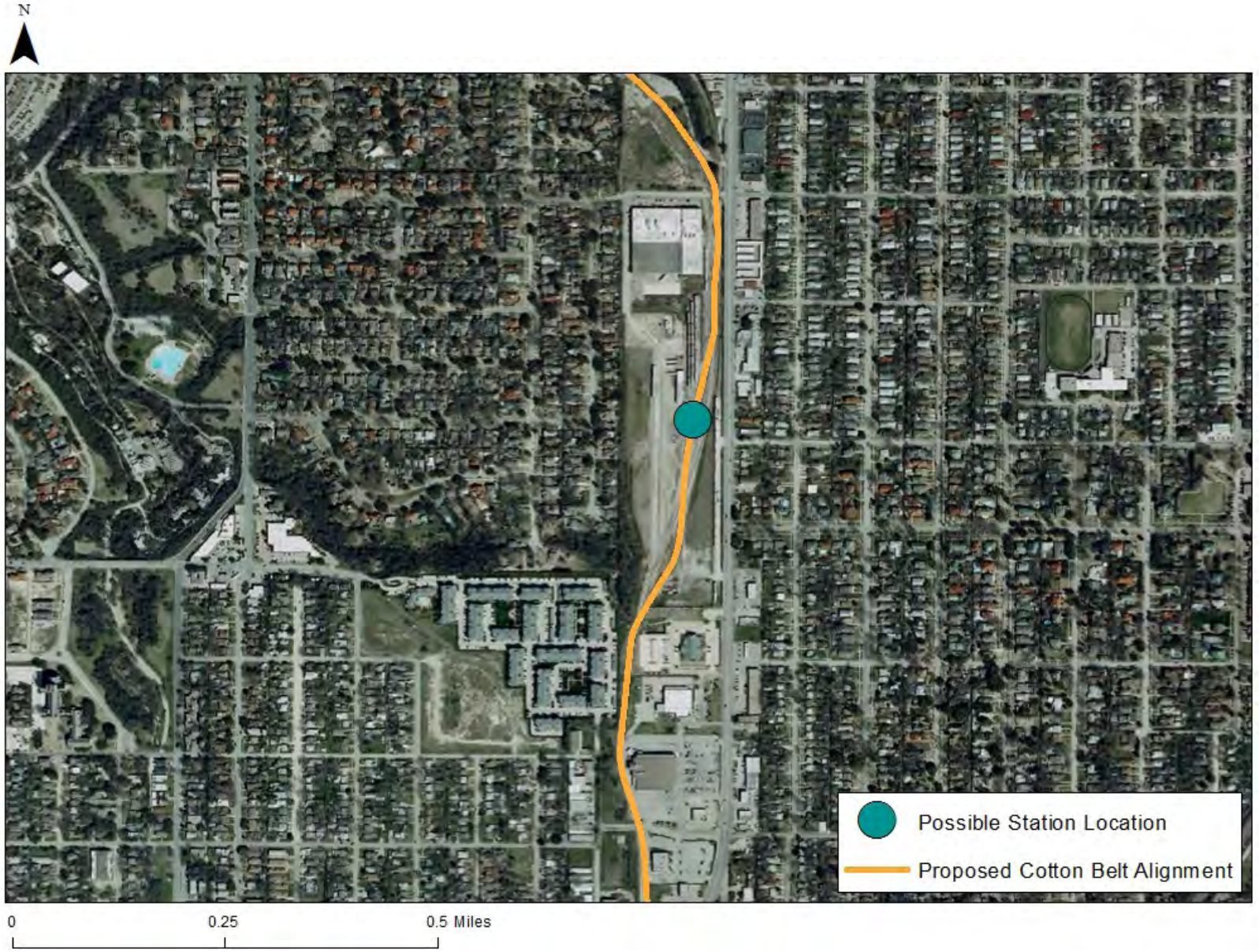
Berry / TCU Station Area (#4)

Station Area Acres	57
2009 Property Value	$47,640,354
Change in City Property Value 2009 to 2010	-3.68%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	9%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	5
TND	15
Transition	0
Retail	10
Office	0
SMF	0
C&I	0
Other	0
TOTAL	30

Development/Redevelopment Begins	
TOD start	10
TND start	10
Transition start	0
Retail start	20
Office start	0
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	5
TND duration	10
Transition duration	0
Retail duration	10
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	52.2%
Total New Population	859
Total New Employment	509

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

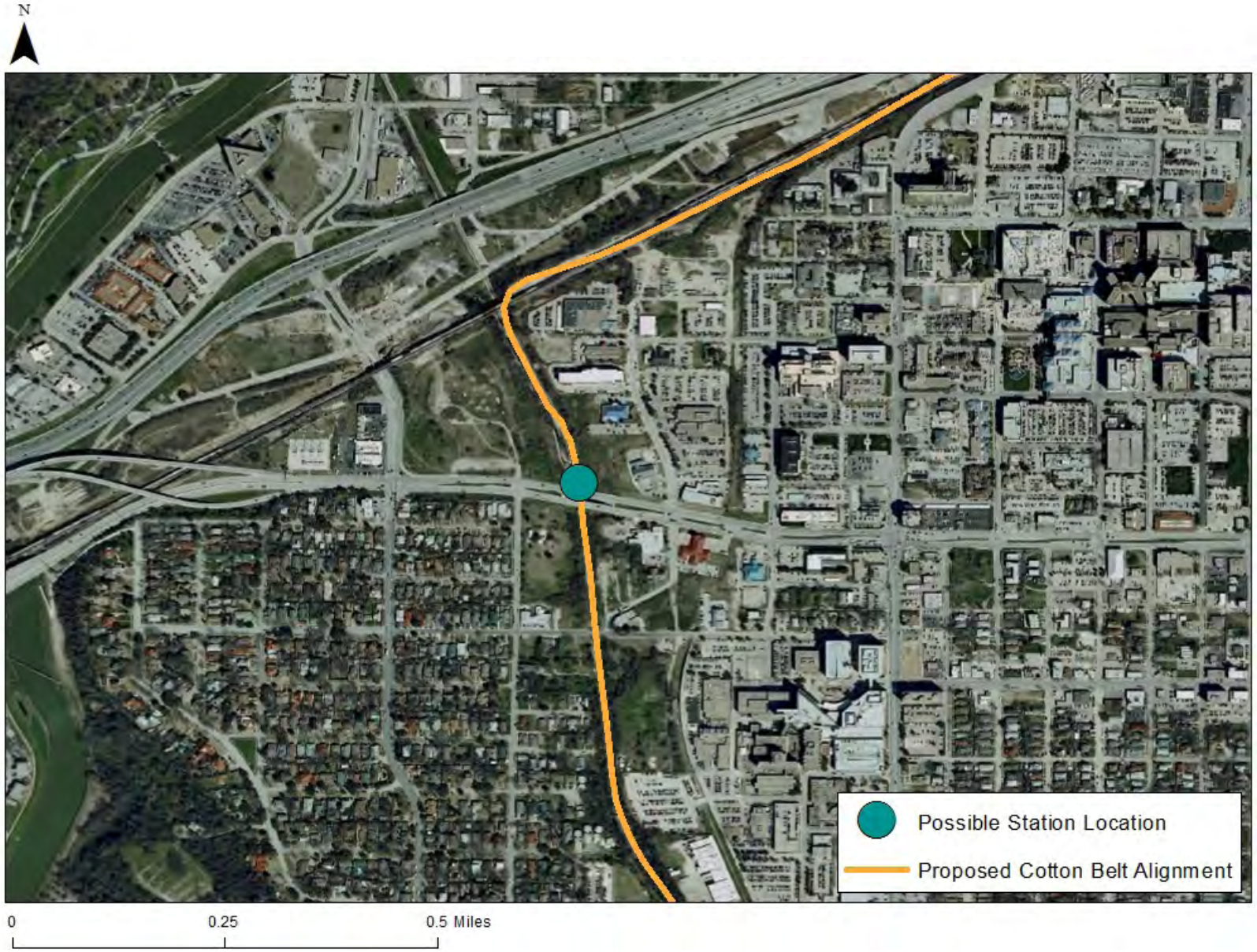
Fort Worth & Western RR



Fort Worth & Western RR (#5)

After consultation with the City of Fort Worth and The T, this station area was eliminated from the analysis.

Medical Station Area



Medical Station Area (#6)

Station Area Acres	79
2009 Property Value	$35,883,542
Change in City Property Value 2009 to 2010	-3.68%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	32%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	25
TND	0
Transition	0
Retail	0
Office	25
SMF	0
C&I	0
Other	0
TOTAL	50

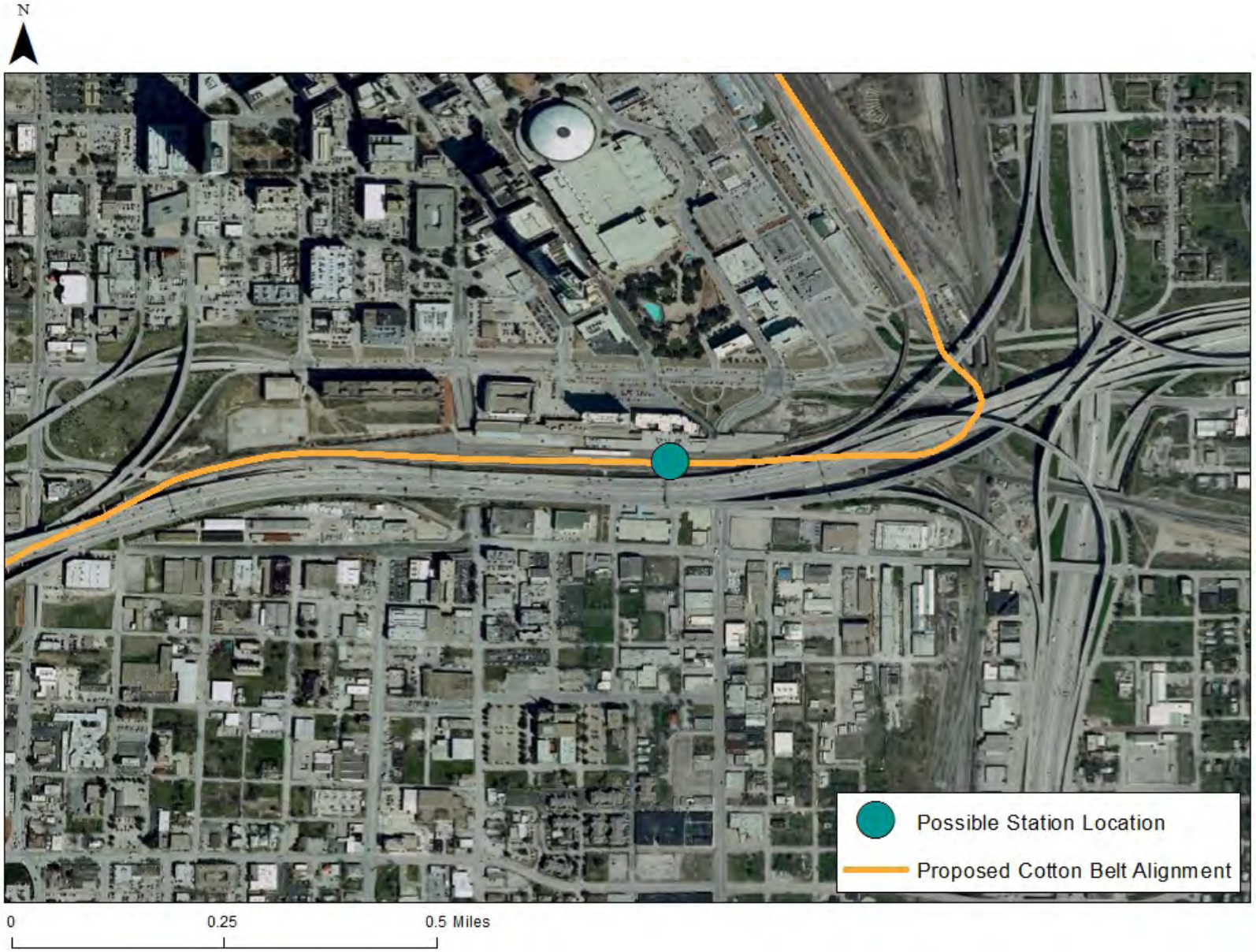
Development/Redevelopment Begins	
TOD start	5
TND start	0
Transition start	0
Retail start	0
Office start	10
SMF start	0
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	10
TND duration	0
Transition duration	0
Retail duration	0
Office duration	15
SMF duration	0
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	63.3%
Total New Population	2,383
Total New Employment	1,976

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

T&P Building Station Area



T&P Building Station Area (#7)

Station Area Acres	41
2009 Property Value	$58,371,223
Change in City Property Value 2009 to 2010	-3.68%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	0%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	0
TND	0
Transition	0
Retail	0
Office	0
SMF	0
C&I	0
Other	0
TOTAL	0

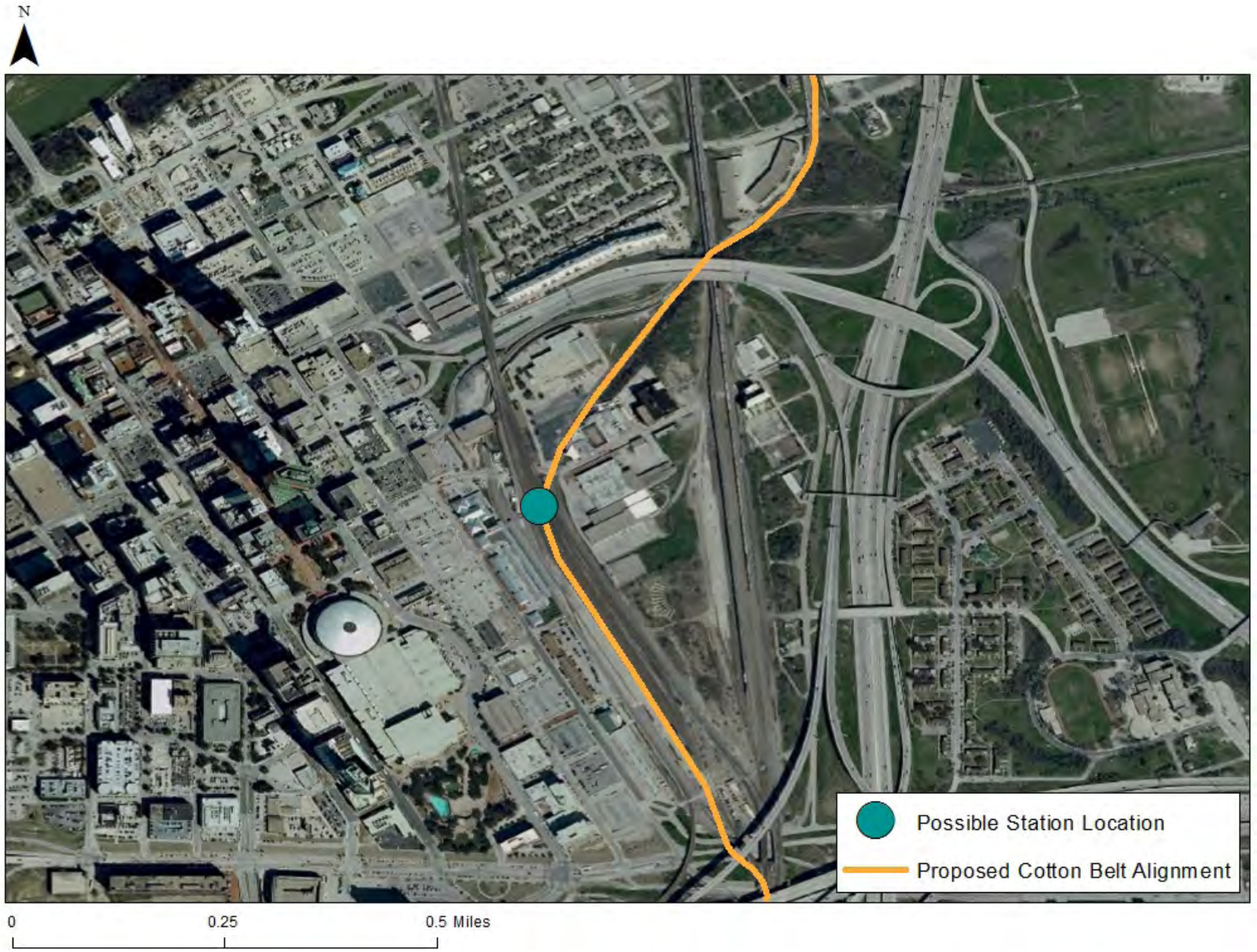
Development/Redevelopment Begins	
TOD start	0
TND start	0
Transition start	0
Retail start	0
Office start	0
SMF start	0
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	0
TND duration	0
Transition duration	0
Retail duration	0
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	0.0%
Total New Population	0
Total New Employment	0

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

ITC Terminal Station Area



ITC Terminal Station Area (#8)

Station Area Acres	27
2009 Property Value	$41,145,717
Change in City Property Value 2009 to 2010	-3.68%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	37%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	10
TND	0
Transition	0
Retail	0
Office	0
SMF	0
C&I	0
Other	0
TOTAL	10

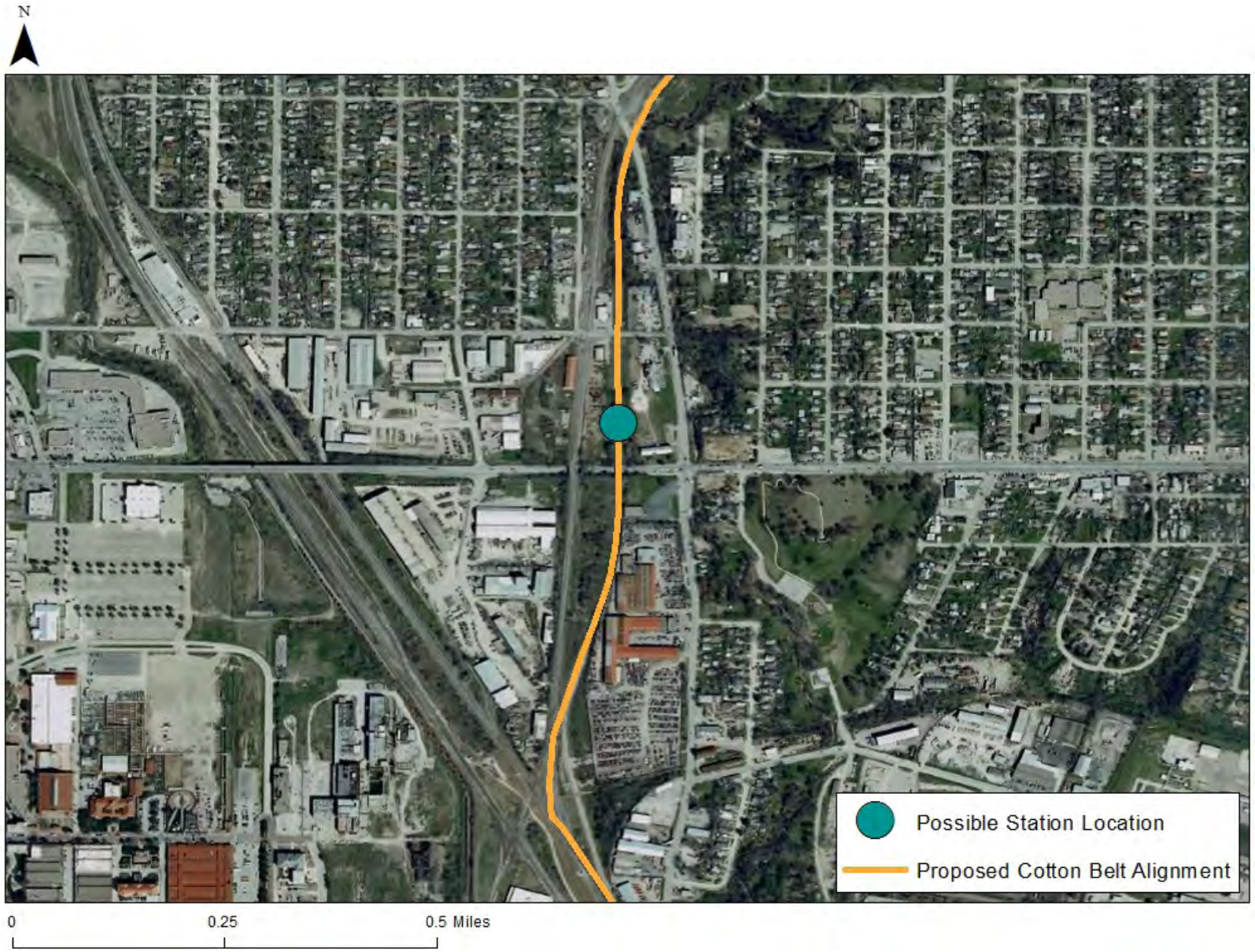
Development/Redevelopment Begins	
TOD start	10
TND start	0
Transition start	0
Retail start	0
Office start	0
SMF start	0
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	10
TND duration	0
Transition duration	0
Retail duration	0
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	37.3%
Total New Population	843
Total New Employment	418

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Stockyards / 28th Street Station Area



Stockyards / 28th Street Station Area (#9)

Station Area Acres	283
2009 Property Value	$67,020,682
Change in City Property Value 2009 to 2010	-3.68%
City	Fort Worth
County	Tarrant
2010 City Property Tax Rate	0.855%
2010 County Property Tax Rate	0.264%
Special District Share of Property	5%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	15
TND	0
Transition	0
Retail	0
Office	0
SMF	0
C&I	0
Other	0
TOTAL	15

Development/Redevelopment Begins	
TOD start	15
TND start	0
Transition start	0
Retail start	0
Office start	0
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	15
TND duration	0
Transition duration	0
Retail duration	0
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	5.3%
Total New Population	1,265
Total New Employment	628

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Beach / Meacham Station Area

Beach / Meacham Station Area (#10)

Station Area Acres	1,421
2009 Property Value	$218,368,027
Change in City Property Value 2009 to 2010	-7.4%
City	Haltom City/Fort Worth
County	Tarrant
2010 Blended City Property Tax Rate	0.799%
2010 County Property Tax Rate	0.264%
Special District Share of Property	2%
City Sales Tax Rate	1.75%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	25
TND	0
Transition	0
Retail	20
Office	50
SMF	50
C&I	700
Other	0
TOTAL	845

(Blended rate: Fort Worth and Haltom City)

Development/Redevelopment Begins	
TOD start	20
TND start	0
Transition start	0
Retail start	15
Office start	15
SMF start	10
C&I start	5
Other start	0
Development/Redevelopment Duration	
TOD duration	15
TND duration	0
Transition duration	0
Retail duration	5
Office duration	10
SMF duration	10
C&I duration	30
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	59.5%
Total New Population	4,638
Total New Employment	13,418

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Haltom City / US 377 Station Area

Haltom City / US 377 Station Area (#11)

Station Area Acres	310
2009 Property Value	$62,924,000
Change in City PV 2009 to 2010	-7.4%
City	Haltom City
County	Tarrant
2010 City Property Tax Rate	0.646%
2010 County Property Tax Rate	0.264%
Special District Share of Property	6%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	20
TND	50
Transition	20
Retail	30
Office	10
SMF	50
C&I	50
Other	0
TOTAL	230

Development/Redevelopment Begins	
TOD start	10
TND start	10
Transition start	10
Retail start	10
Office start	0
SMF start	10
C&I start	5
Other start	0
Development/Redevelopment Duration	
TOD duration	10
TND duration	15
Transition duration	15
Retail duration	5
Office duration	0
SMF duration	10
C&I duration	15
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	74.2%
Total New Population	5,361
Total New Employment	2,950

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

North Richland Hills / Ironhorse Station Area

North Richland Hills / Ironhorse Station Area(#12)

Station Area Acres	363
2009 Property Value	$155,036,322
Change in City Property Value 2009 to 2010	-3.9%
City	North Richland Hills
County	Tarrant
2010 City Property Tax Rate	0.570%
2010 County Property Tax Rate	0.264%
Special District Share of Property	14%
City Sales Tax Rate	1.50%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	50
TND	25
Transition	0
Retail	75
Office	100
SMF	0
C&I	0
Other	0
TOTAL	250

Development/Redevelopment Begins	
TOD start	5
TND start	10
Transition start	0
Retail start	15
Office start	15
SMF start	0
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	20
TND duration	20
Transition duration	0
Retail duration	15
Office duration	15
SMF duration	0
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	68.9%
Total New Population	6,687
Total New Employment	7,297

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

North Richland Hills / Smithfield Station Area

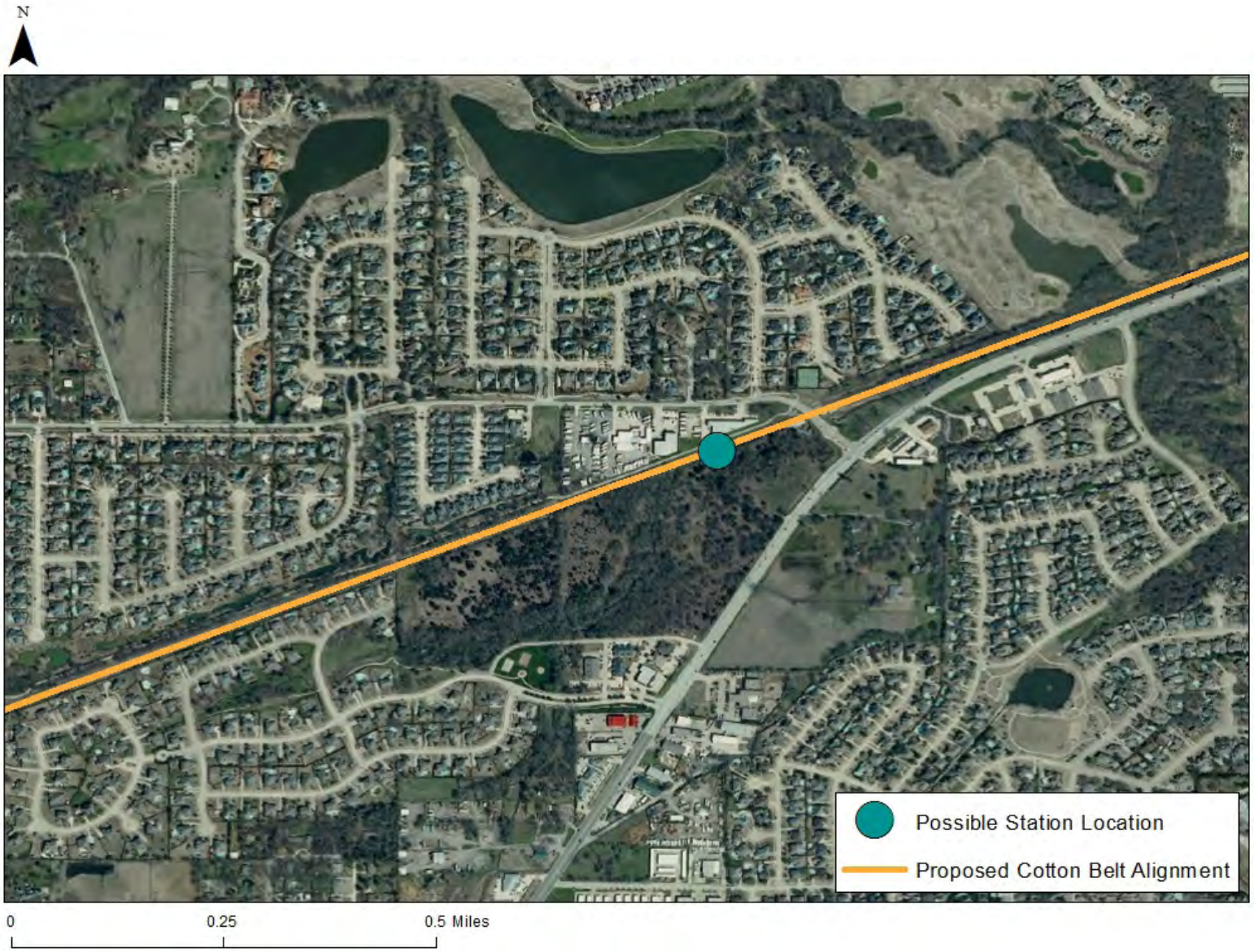
North Richland Hills / Smithfield Station Area (#13)

Station Area Acres	258
2009 Property Value	$56,656,517
Change in City Property Value 2009 to 2010	-3.9%
City	North Richland Hills
County	Tarrant
2010 City Property Tax Rate	0.570%
2010 County Property Tax Rate	0.264%
Special District Share of Property	12%
City Sales Tax Rate	1.50%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	30
TND	25
Transition	75
Retail	10
Office	10
SMF	0
C&I	0
Other	0
TOTAL	150

Development/Redevelopment Begins	
TOD start	5
TND start	5
Transition start	10
Retail start	10
Office start	10
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	20
TND duration	20
Transition duration	20
Retail duration	10
Office duration	10
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	58.2%
Total New Population	4,728
Total New Employment	2,243

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

John McCain Station Area



John McCain Station Area (#14)

The City of Colleyville has requested this station area not be considered. With the proposed Southlake Station nearby, the John McCain Station Area has been eliminated from the iFi analysis.

Southlake Station Area

Southlake Station Area (#15)

Station Area Acres	282
2009 Property Value	$25,580,362
Change in City PV 2009 to 2010	-1.95%
City	Southlake
County	Tarrant
2010 City Property Tax Rate	0.462%
2010 County Property Tax Rate	0.264%
Special District Share of Property	27.8%
City Sales Tax Rate	1.50%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	50
TND	30
Transition	60
Retail	20
Office	20
SMF	0
C&I	0
Other	0
TOTAL	180

Development/Redevelopment Begins	
TOD start	20
TND start	20
Transition start	20
Retail start	20
Office start	20
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	10
TND duration	15
Transition duration	15
Retail duration	10
Office duration	10
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	63.8%
Total New Population	6,458
Total New Employment	3,618

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Grapevine / Main Street Station Area

Grapevine / Main Street Station Area (#16)

Station Area Acres	221
2009 Property Value	$145,726,663
Change in City Property Value 2009 to 2010	-4.7%
City	Grapevine
County	Tarrant
2010 City Property Tax Rate	0.350%
2010 County Property Tax Rate	0.264%
Special District Share of Property	35.7%
City Sales Tax Rate	1.50%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	25
TND	15
Transition	30
Retail	0
Office	0
SMF	0
C&I	0
Other	0
TOTAL	70

Development/Redevelopment Begins	
TOD start	5
TND start	5
Transition start	10
Retail start	0
Office start	0
SMF start	0
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	15
TND duration	15
Transition duration	10
Retail duration	0
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	31.6%
Total New Population	3,009
Total New Employment	1,268

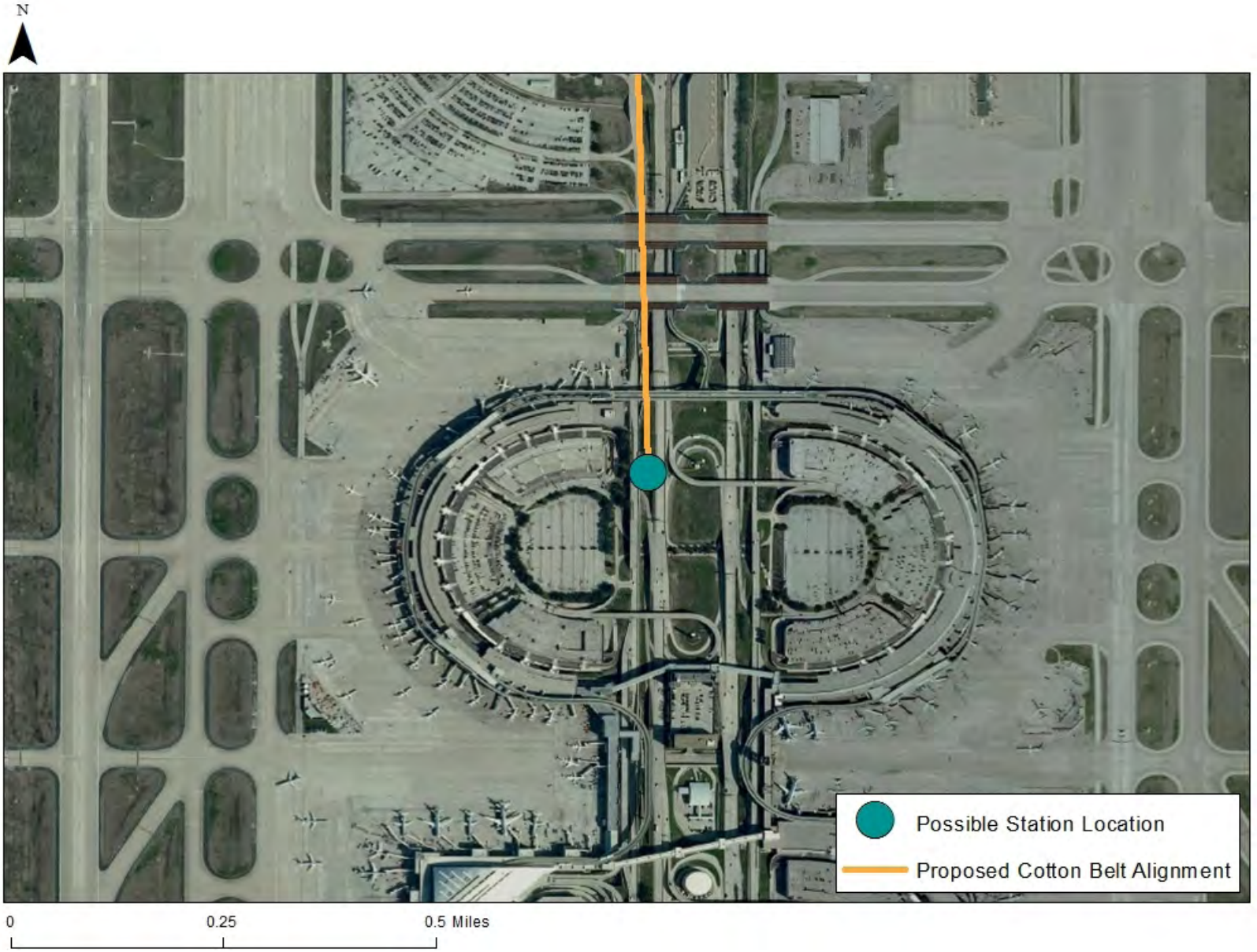
TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Airport North Station Area

Airport North Station Area (#17)

No analysis is available for this proposed station area; the station area remains a viable location.

DFW Airport A-B Terminal Station Area



DFW Airport A-B Terminal Station Area (#17a)

No additional land development is anticipated at the DFW Airport A-B Terminal Station. This station is not included in the analysis but will be included in the proposed system.

North Lake Station Area

North Lake Station Area (#18)

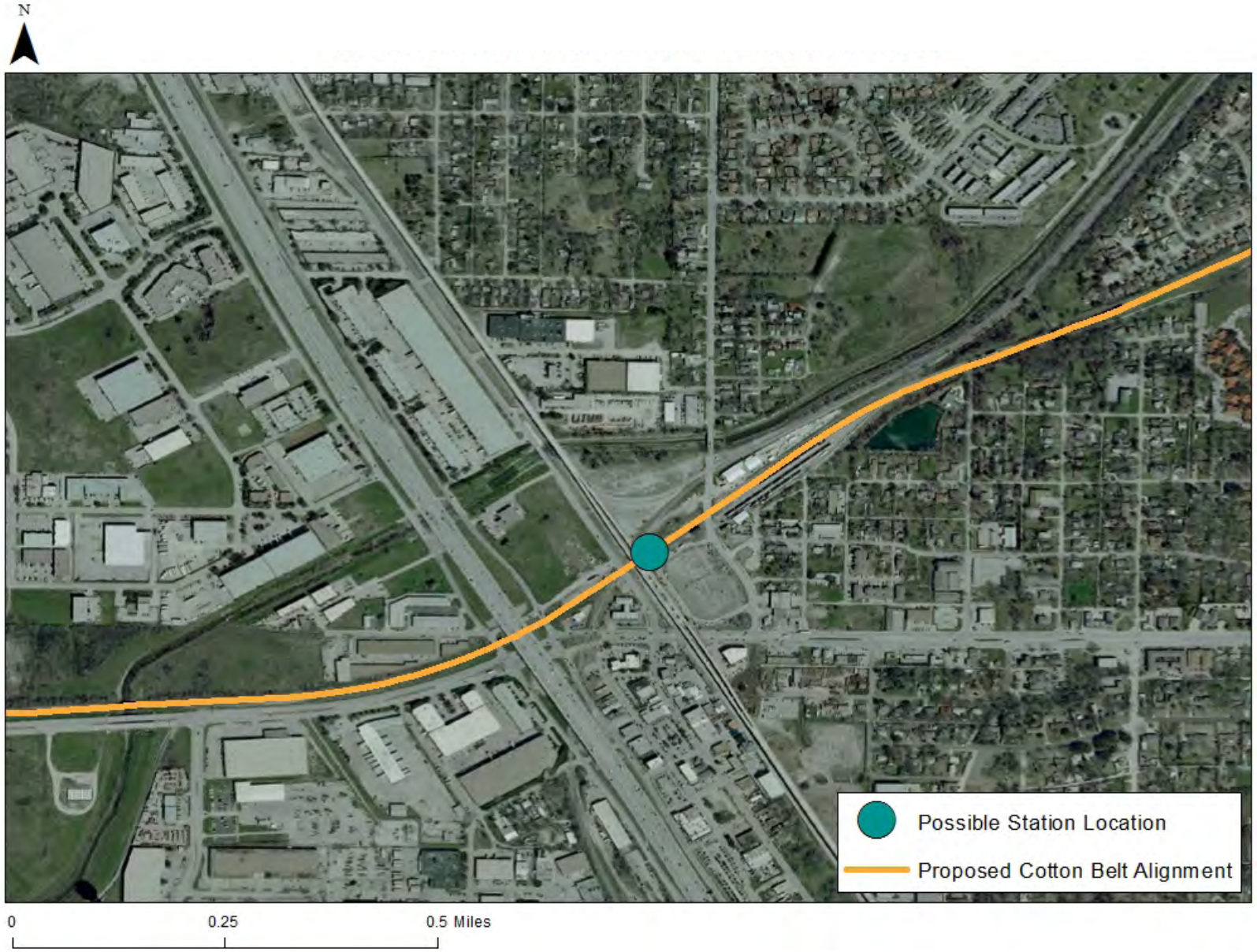
Station Area Acres	296
2009 Property Value	$45,646,110
Change in City PV 2009 to 2010	-0.6%
City	Dallas/Coppell
County	Dallas
2010 City Property Tax Rate (blended)	0.775%
2010 County Property Tax Rate	0.243%
Special District Share of Property	42.4%
City Sales Tax Rate	1.75%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	30
TND	0
Transition	0
Retail	10
Office	30
SMF	0
C&I	
Other	0
TOTAL	70

Development/Redevelopment Begins	
TOD start	10
TND start	0
Transition start	0
Retail start	10
Office start	10
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	5
TND duration	0
Transition duration	0
Retail duration	5
Office duration	10
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	23.6%
Total New Population	2,970
Total New Employment	2,540

(Blended rate: Dallas and Coppell)

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Downtown Carrollton Station Area



Downtown Carrollton Station Area (#19)

Station Area Acres	180
2009 Property Value	$106,204,550
Change in City PV 2009 to 2010	-4.0%
City	Carrollton
County	Dallas
2010 City Property Tax Rate	0.618%
2010 County Property Tax Rate	0.243%
Special District Share of Property	0%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	0
TND	0
Transition	80
Retail	20
Office	20
SMF	0
C&I	20
Other	0
TOTAL	140

Development/Redevelopment Begins	
TOD start	5
TND start	0
Transition start	15
Retail start	15
Office start	15
SMF start	0
C&I start	5
Other start	0

Development/Redevelopment Duration	
TOD duration	10
TND duration	0
Transition duration	15
Retail duration	10
Office duration	10
SMF duration	0
C&I duration	20
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	77.8%
Total New Population	1,968
Total New Employment	1,615

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Addison Station Area

Addison Station Area (#20)

Station Area Acres	317
2009 Property Value	$505,585,595
Change in City PV 2009 to 2010	-7.6%
City(	Addison/Dallas/Farmers Branch
County	Dallas
2010 City Property Tax Rate (blended)	0.531%
2010 County Property Tax Rate	0.243%
Special District Share of Property	7%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	50
TND	0
Transition	0
Retail	0
Office	0
SMF	0
C&I	250
Other	0
TOTAL	300

Development/Redevelopment Begins	
TOD start	5
TND start	0
Transition start	0
Retail start	0
Office start	0
SMF start	0
C&I start	5
Other start	0

Development/Redevelopment Duration	
TOD duration	10
TND duration	0
Transition duration	0
Retail duration	0
Office duration	0
SMF duration	0
C&I duration	20
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	94.7%
Total New Population	4,216
Total New Employment	5,722

(Blended rate: Addison, Dallas and Farmers Branch)

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Knoll Trail Station Area

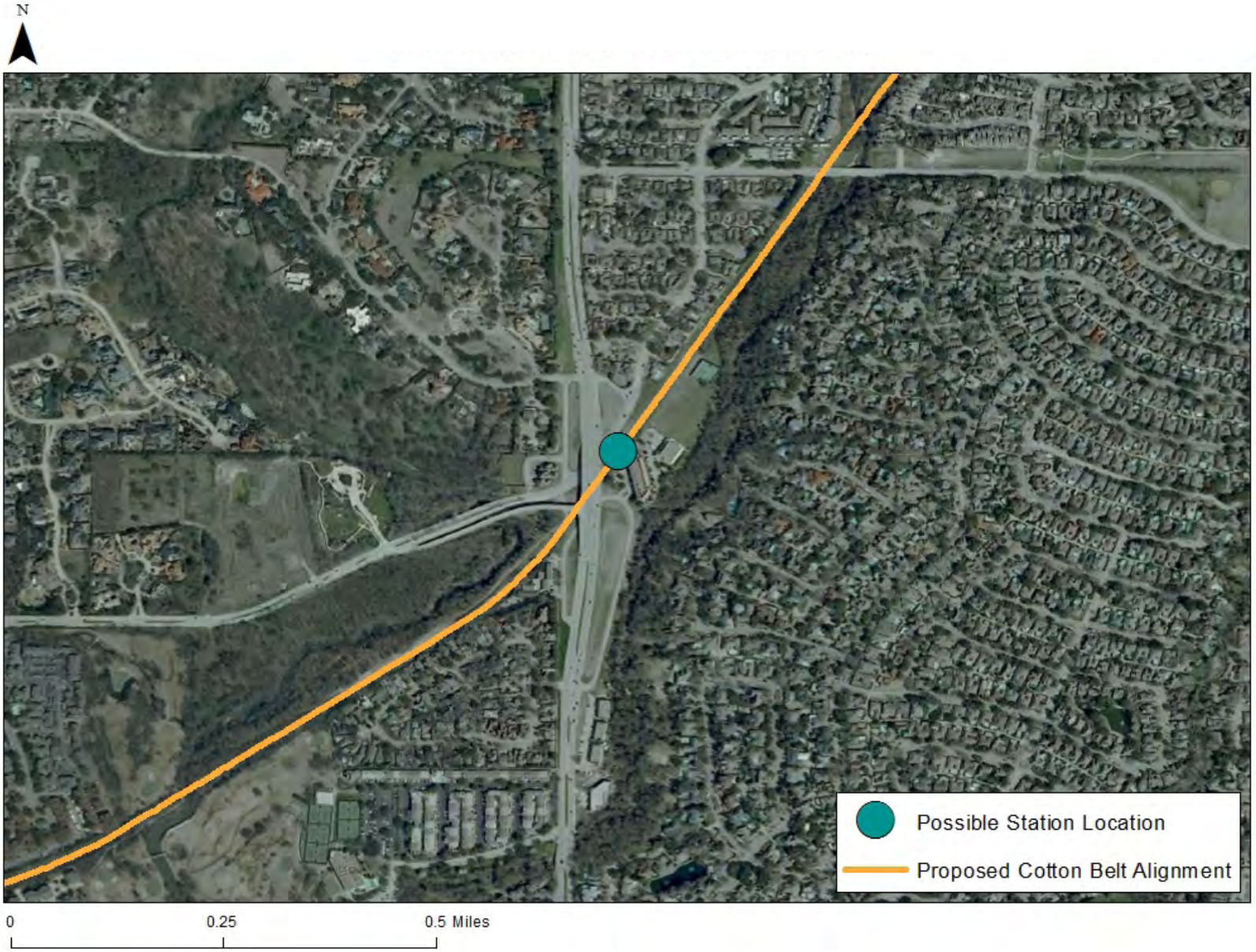
Knoll Trail Station Area (#21)

Station Area Acres	307
2009 Property Value	$611,515,120
Change in City Property Value 2009 to 2010	-4.33%
City	Dallas
County	Dallas
2010 City Property Tax Rate	0.797%
2010 County Property Tax Rate	0.243%
Special District Share of Property	7%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	20
TND	0
Transition	0
Retail	40
Office	35
SMF	0
C&I	0
Other	0
TOTAL	95

Development/Redevelopment Begins	
TOD start	10
TND start	0
Transition start	0
Retail start	20
Office start	5
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	5
TND duration	0
Transition duration	0
Retail duration	10
Office duration	20
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	31.0%
Total New Population	2,511
Total New Employment	2,814

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Preston Road Station Area



Preston Road Station Area (#22)

Station Area Acres	11
2009 Property Value	$5,016,190
Change in City Property Value 2009 to 2010	-4.33%
City	Dallas
County	Dallas
2010 City Property Tax Rate	0.797%
2010 County Property Tax Rate	0.243%
Special District Share of Property	0%
City Sales Tax Rate	1.0%
City Hotel Tax Rate	7.0%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	0
TND	0
Transition	0
Retail	5
Office	0
SMF	0
C&I	0
Other	0
TOTAL	5

Development/Redevelopment Begins	
TOD start	0
TND start	0
Transition start	0
Retail start	10
Office start	0
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration	0
TND duration	0
Transition duration	0
Retail duration	5
Office duration	0
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	44.3%
Total New Population	55
Total New Employment	84

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Renner Village / Texas A&M Station Area

Renner Village / Texas A&M Station Area (#23)

Station Area Acres	524
2009 Property Value	$241,559,502
Change in City Property Value 2009 to 2010	-4.33%
City	Dallas/Richardson
County	Collin/Dallas
2010 City Property Tax Rate (blended)	0.793%
2010 County Property Tax Rate (blended)	0.240%
Special District Share of Property	15%
City Sales Tax Rate	1.0%
City Hotel Tax Rate	7.0%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	80
TND	200
Transition	0
Retail	40
Office	60
SMF	50
C&I	0
Other	0
TOTAL	430

Development/Redevelopment Begins	
TOD start	5
TND start	10
Transition start	0
Retail start	10
Office start	5
SMF start	10
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	20
TND duration	20
Transition duration	0
Retail duration	15
Office duration	20
SMF duration	15
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	82.1%
Total New Population	13,976
Total New Employment	8,018

(Blended rate: Dallas and Richardson)

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

UTD / Synergy Park Station Area

UTD / Synergy Park Station Area (#24)

Station Area Acres	601
2009 Property Value	$172,110,875
Change in City Property Value 2009 to 2010	-4.33%
City	Richardson
County	Collin
2010 City Property Tax Rate	0.635%
2010 County Property Tax Rate	0.240%
Special District Share of Property	10%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	60
TND	0
Transition	0
Retail	20
Office	20
SMF	20
C&I	0
Other	0
TOTAL	120

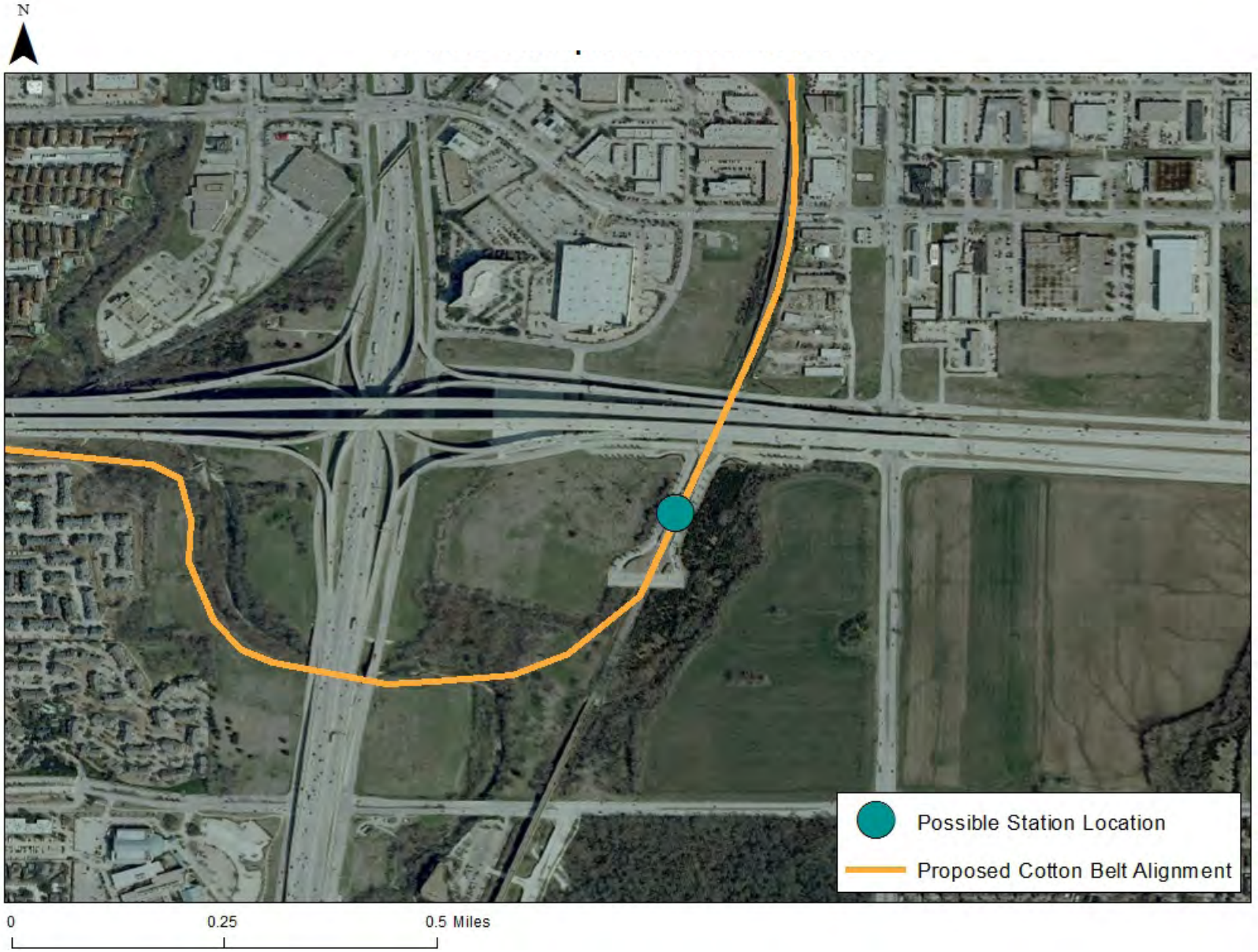
Development/Redevelopment Begins	
TOD start	5
TND start	0
Transition start	0
Retail start	10
Office start	10
SMF start	5
C&I start	0
Other start	0

Development/Redevelopment Duration	
TOD duration	20
TND duration	0
Transition duration	0
Retail duration	15
Office duration	15
SMF duration	20
C&I duration	0
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	20.0%
Total New Population	6,203
Total New Employment	3,596

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Bush Turnpike Station Area



BushTurnpike Station Area (#25)

Station Area Acres	415
2009 Property Value	$121,582,308
Change in City PV 2009 to 2010	-4.25%
City	Richardson
County	Collin
2010 City Property Tax Rate	0.635%
2010 County Property Tax Rate	0.240%
Special District Share of Property	24%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	100
TND	50
Transition	0
Retail	50
Office	75
SMF	0
C&I	0
Other	0
TOTAL	275

Development/Redevelopment Begins	
TOD start year	5
TND start	10
Transition start	0
Retail start	10
Office start	10
SMF start	0
C&I start	0
Other start	0
Development/Redevelopment Duration	
TOD duration in years	20
TND duration	15
Transition duration	0
Retail duration	10
Office duration	20
SMF duration	0
C&I duration	0
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	66.3%
Total New Population	10,900
Total New Employment	8,256

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

12th Street Station Area

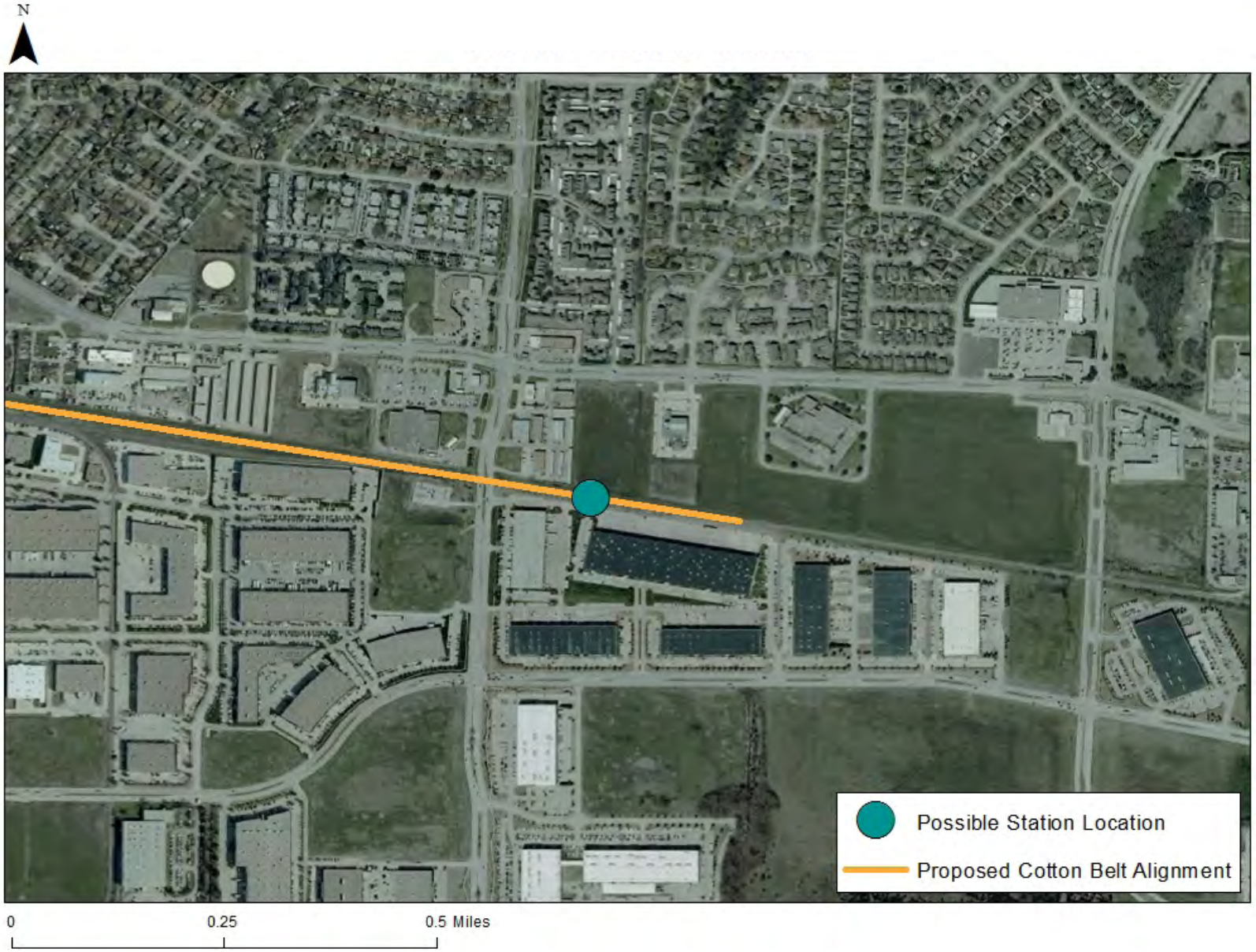
12th Street Station Area (#26)

Station Area Acres	370
2009 Property Value	$179,963,197
Change in City PV 2009 to 2010	-3.39%
City	Plano
County	Collin
2010 City Property Tax Rate	0.489%
2010 County Property Tax Rate	0.240%
Special District Share of Property	11%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%
Land Use Pattern	Acres
TOD	40
TND	20
Transition	0
Retail	30
Office	20
SMF	0
C&I	75
Other	0
TOTAL	185

Development/Redevelopment Begins	
TOD start	5
TND start	10
Transition start	0
Retail start	10
Office start	10
SMF start	0
C&I start	10
Other start	0
Development/Redevelopment Duration	
TOD duration	20
TND duration	15
Transition duration	0
Retail duration	15
Office duration	20
SMF duration	0
C&I duration	15
Other duration	0
Total Impact/Context	
Development/Redevelopment Share	50.1%
Total New Population	4,360
Total New Employment	4,188

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

Shiloh Station Area



Shiloh Station Area (#27)

Station Area Acres	371
2009 Property Value	$145,622,156
Change in City PV 2009 to 2010	-3.39%
City	Plano
County	Collin
2010 City Property Tax Rate	0.489%
2010 County Property Tax Rate	0.240%
Special District Share of Property	3%
City Sales Tax Rate	1.00%
City Hotel Tax Rate	7.00%
Special District Rate	0.15%

Land Use Pattern	Acres
TOD	10
TND	30
Transition	30
Retail	30
Office	0
SMF	100
C&I	100
Other	0
TOTAL	300

Development/Redevelopment Begins	
TOD start	10
TND start	10
Transition start	10
Retail start	10
Office start	0
SMF start	15
C&I start	10
Other start	0

Development/Redevelopment Duration	
TOD duration	10
TND duration	10
Transition duration	10
Retail duration	10
Office duration	0
SMF duration	10
C&I duration	10
Other duration	0

Total Impact/Context	
Development/Redevelopment Share	80.9%
Total New Population	4,360
Total New Employment	4,188

TOD – Transit Oriented Development; TND – Traditional Neighborhood Development; OffMF – Office Multi-Family; C&I – Commercial and Industrial; SMF – Suburban Multi Family

APPENDIX B

Incorporation of PLC Data into IMG Model

INCORPORATION OF PLC DATA INTO IMG MODEL

BACKGROUND

Public Financial Management, Inc., (PFM) is under contract to Partnership for Livable Communities (PLC) for the Innovative Finance Initiative (iFi) for the Cotton Belt Corridor. Under this study funded by the North Central Texas Council of Governments, PLC has developed preliminary revenue estimates for the Cotton Belt commuter rail line and reviewed the cost estimates provided by DART and the T. As part of this study, PFM has incorporated PLC's preliminary data into the pre-existing DART financial model (the IMG model) for the Cotton Belt project for initial analysis. The following points should be considered when analyzing the model and its results.

- The data and results are preliminary. Assumptions regarding costs and revenues may change and such changes may affect any results of this initial analysis.

- The current study of the Cotton Belt project is at an early stage. No determination has been made as to the structure or organization for financial implementation of the project, even in terms of a limited number of possible scenarios. As such, no assumptions regarding implementation were made in the financial model. The exercise examines only high-level data to understand the implications of the initial findings of the PLC study. The PLC data refers only to revenues and costs – it does not includes information on financing since the structure for implementing the project and the associated financing costs are unknown for any potential public implementation option and any potential private implementation option.

APPROACH

Several changes were made to the IMG model to incorporate PLC's preliminary findings.[1] Since the original model was based on a number of Scenarios, each with various assumptions, the PLC information was incorporated into this format. The capital expenditure for all Scenarios was increased to the current estimate of $1.8 billion for construction of the entire Cotton Belt system. Annual financing costs of five percent of total capital cost were incorporated into the model. Ridership assumptions were also adjusted to incorporate higher estimated ridership for the full Cotton Belt line instead of lower figures for a DART-only project. Since the analysis is preliminary and only intended to compare costs and revenues, the 'Results' sheet was adjusted to measure the present value of costs (capital and operating) to the present value of revenues. Milestone payments were set at 100 percent of capital expenditures for the same reason.

Three new scenarios were added to the IMG model. Each is based on the PLC revenue analysis, with variations in discount rates, average farebox revenue, and levels of value capture. On the cost side, all scenarios assume an operating cost level that reflects DART's structure under the public finance option, while the private option reflects operating costs at the mid-point between the DART structure and the national average. In addition:

20. PLC #1: uses a 5 percent discount rate, 50 percent value capture, $0.14/mile average farebox revenue and 30 percent capital expenditure savings from P3
21. PLC #2: uses a 6 percent discount rate, 35 percent value capture, $0.14/mile average farebox revenue and 15 percent capital expenditure savings from P3
22. PLC #3: uses a 7 percent discount rate, 35 percent value capture, and $0.10/mile average farebox revenue

RESULTS

The results of the analysis are shown in the table below, which is excerpted from a new 'VfM Results' sheet that was added to the DART model. In this case, the Value for Money (VfM) measure is simply the difference between the NPV of the public option and the NPV of the private option. Results are shown for a 50-year horizon and an 80-year horizon (which is included since the IMG model extends for 80 years). It should be noted that the information provided by DART on a possible contribution beginning in 2036 was extended by the inflation rate to reach the 80-year horizon.

Since this is an early stage analysis and a project structure has not yet been determined, detailed financing assumptions cannot be made at this point. For illustrative purposes, financing costs of 5 percent per year are shown for each scenario. While the same interest rate was used for the public and private options, the amount of financing required for each option is different based on assumptions about savings in capital expenditures.

NPV Analysis (in millions)					
50 Years					
	Public Option	Private Option	Value for Money	Indicative Public Finance Cost @ 5%	Indicative Private Financing Cost @5%
PLC Cotton Belt High	($32.50)	$892.60	$925.10	($1,852.17)	($1,296.52)
PLC Cotton Belt Medium	($382.15)	$195.13	$577.29	($1,614.36)	($1,372.21)
PLC Cotton Belt Low	($559.77)	($305.75)	$254.02	($1,426.83)	($1,426.83)
80 Years					
	Public Option	Private Option	Value for Money	Indicative Public Finance Cost @ 5%	Indicative Private Financing Cost @5%
PLC Cotton Belt High	$410.32	$1,449.83	$1,039.51	($1,988.17)	($1,391.72)
PLC Cotton Belt Medium	($169.46)	$470.90	$640.36	($1,690.90)	($1,437.26)
PLC Cotton Belt Low	($443.67)	($154.46)	$289.21	($1,470.39)	($1,470.39)

[1] A full summary of the changes made is included as Appendix 1.

PFM
The PFM Group

APPENDIX 1
SUMMARY OF CHANGES MADE TO THE DART COTTON BELT FINANCING MODEL AS A RESULT OF THE PLC COTTON BELT ANALYSIS

'Assumptions (Non-time)'

Macroeconomics
Changed Annual Inflation Rate to 2.4 percent

Construction
Added "Cotton Belt Increased Capex Factor" to adjust capital expenditures to current estimates (Row 96). The factor is set at 2.09, reflecting the new capital cost estimate of $1.8 billion compared to the previous capital cost estimate of $861,632,000. Each component of capex is multiplied by this factor.

DART NewCo Other Revenues
Set Advertising and Concessions equal to zero for PLC Scenarios

'Scenarios Input'

Changed "Construction Start Date" for all Scenarios to 1/1/2014

Changed "Daily Ridership" for all Scenarios to 26,624

Changed "Mileage" for all Scenarios to 62

Changed "Milestone Payments" for all Scenarios to 100 percent

Added PLC Cotton Belt Assumptions (Rows 88-94) to adjust for discount rate, percentage of value capture and private O&M savings.

Created three new scenarios.

Scenario 20: PLC Cotton Belt High
- 50 percent value capture
- $0.14 farebox
- 30 percent savings on capex
- 5 percent discount rate

Scenario 21: PLC Cotton Belt Medium
- 35 percent value capture
- $0.14 farebox
- 15 percent savings on capex
- 6 percent discount rate

Scenario 22: PLC Cotton Belt Low
- 35 percent value capture
- $0.10 farebox
- 0 percent savings on capex
- 7 percent discount rate

All PLC Scenarios include Milestone Payments at 100 percent of Project Cost.

'Revenue – Ridership & Other'

Inserted section on PLC revenues, Rows 142-166

'PC Construction'

Inserted formula to adjust capex values based on savings indicated by 'Scenario Input' Cell F94

'PC Income Statement'

"Total Operating Expense" – inserted formula to use midpoint PLC opex values for PLC scenarios

'DART NewCo Inc Statement'

Added "Public Value Capture" to revenues (Row 27)
Added "Public Value Capture" to "Components of Net Income" (Row 57)

'PSC Results'

Adjusted formulae so they show PLC revenues for PLC Scenarios and DART/IMG revenues for DART/IMG Scenarios.

Added issuance costs to NPV calculations.

Added financing costs of five percent of total capital cost per annum for each scenario.


INNOVATIVE
FINANCE
INITIATIVE
COTTON BELT