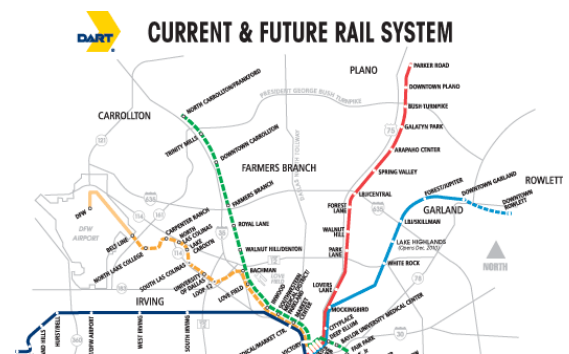


The Potential Economic and Fiscal Impacts of Transit-Oriented Development along the DART Orange Line: How a Delay and Realignment Would Negatively Affect Irving/Las Colinas, the City of Dallas, and DFW International Airport



Prepared for:

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Background

The City of Irving, which has been paying the DART sales tax since 1983, has worked diligently over the past several decades to secure the alignments, stations and funding for the DART LRT Orange Line that is supposed to connect downtown Dallas with Dallas-Fort Worth International Airport (DFW). DART has promised to operate the line to Irving's Las Colinas Urban Center by December 2011 and to extend it to Belt Line Road by 2012 and to DFW Airport by 2013. Two Las Colinas stations are scheduled to open in 2011: the Lake Carolyn Station at the corner of O'Connor and Lake Carolyn Parkway and the North Las Colinas Station at Northwest Highway near the new convention center. A third "deferred" station in South Las Colinas is planned for the future to connect the Orange Line to the proposed BNSF commuter rail line.

But recently the Regional Transportation Council (RTC) has suggested a revised alignment for the final segment of the Orange Line that would eliminate the direct connection to DFW Airport. Instead, the line would terminate at a "connector" with the planned Cotton Belt commuter rail line north of the airport in Grapevine. Passengers headed for the airport would then have to transfer to an extension of the DFW SkyLink people mover. The RTC has indicated it will make a recommendation one way or the other by June, and the president of DART has indicated he will take direction from the Council in making his recommendations to the DART board.

Irving officials have used the promise of a direct airport connection as a major selling point for its new convention center and entertainment venue. This direct airport connection by 2013 has also helped attract new and expanding businesses to Irving and has been a major catalyst for the phenomenal amount of transit-oriented in the city. Changing the alignment of the

Orange Line at this late date would do serious economic harm to the City of Irving, especially the transit-oriented development projects in and around the Las Colinas Urban Center. It would also push back rail service to DFW Airport by years. What's more, the economic damage could spread beyond Irving and could well affect the City of Dallas as direct rail service to DFW Airport has been a big selling point in justifying expansion of Dallas convention center and planned convention center hotel.

The economic and fiscal impacts of transit-oriented development (TOD) in Irving/Las Colinas

With ongoing and planned commercial and residential projects, Irving/Las Colinas will be home to one of the largest transit-oriented developments in the nation. What's more, the planned expansion of the Las Colinas Urban Center represents a huge commitment to public/private partnerships. For example, the City of Irving is building a \$31 million parking garage and investing \$16 million in land reclamation and plaza construction to facilitate the Water Street project in the Urban Center. The City is also committing \$7 million in tax increment financing (TIF) reimbursement to the Water Street development. All of these investments have been made in anticipation of the forthcoming DART station at Lake Carolyn.

But the most ambitious public/private partnership is the planned Irving Convention and Event Center at the north end of Las Colinas. Along with a DART Orange Line station, this \$500 million complex will include a 250,000 square foot convention center, a 3,400-seat entertainment venue, and a 400-room hotel. Irving voters have approved the issuance of \$350 million in revenue bonds, with the debt service covered through the City's four percent hotel tax. The City has also partnered with Live Nation, the nation's largest concert promoter and ticket

seller, to operate the entertainment venue that will also include restaurants and clubs. Site work is currently underway.

Construction and operations of the aforementioned projects, along with a dozen others underway or planned, will create thousands of jobs, millions of new income, and substantial gains in local tax receipts while at the same time drawing new residents and visitors to the Urban Center. Indeed, including recently completed projects, total TOD investment will approach \$5 billion. But should the Orange Line alignment be altered at this time, and planned projects delayed or canceled as a result, the potential economic and fiscal benefits could be seriously eroded.

Using an input/output model, we can calculate the economic and fiscal impacts that attend construction and ongoing operations of the recently completed, currently underway, and planned developments within one-half mile of the Orange Line alignment. In what follows, we treat construction and facility operations estimates separately.

Construction impacts are temporary in that they last as long as building activity is underway. By contrast, ongoing operations reflect recurring, annual spending at the new facilities. We have based the construction cost estimates on media reports and information provided by developers and Irving Chamber of Commerce officials. To estimate the economic and fiscal impacts of construction spending we utilize the IMPLAN input-output model. This model provides estimates of total economic activity, labor and property income, employment, and indirect business taxes based on spending associated with specified activities such as commercial building construction, infrastructure development, and residential property construction. The model captures direct, indirect, and induced impacts. Direct impacts are those related to primary firm expenditures, such as a construction contractor leasing earth-moving

equipment. Indirect impacts estimate the spending by the vendors to primary firms. For example, the company that leases earth-moving equipment buys replacement parts for their equipment and rents space for their offices. Induced impacts measure the economic activity of the employees of these direct and indirect firms spending a portion of the earnings in the local economy for goods and services. At each stage of the analysis the model adjusts for spending that flows out of the specified area so that only local spending is included in the impact estimates. When added together, the sum of the direct, indirect, and induced impacts is usually larger than initial spending, which is the “multiplier effect.”

For this analysis we have estimated the impacts on the Dallas County economy of both construction spending and the on-going operations by businesses occupying the new buildings in Irving. Some of the projects listed are recently completed, some are under construction, and others are in the planning stages. Table 1 lists the projects included in our analysis

Table 1

Irving Transit and Transit Oriented Development Projects

Recently Completed			
Lofts	Canal Side Lofts	Mandalay on the Lake	Bella Casita
Delante	Monterra at LC	RIM (purchase)	North Lake Sciences & Medical Professional Bldg
Tanger Outlet Mall	Aloft Hotel	North Lake Labs, Classrooms, Parking	
Under Construction			
Alta Lakeshore Lofts	Lakes of LC	Lincoln LC	Irving Convention & Event Center
Planned			
Water Street	DART Rail	BNSF Commuter Line	Univ. Dallas Pharmacy School
Las Colinas Station	Vela	Carpenter Ranch Station	Texas Stadium Redevelopment
Fram Senior Village	North Shore	Las Colinas Peninsula	

Source: Irving Chamber of Commerce

Impacts of Construction Spending

When added together, construction spending for the projects listed in Table 1 will approach \$5 billion.¹ This spending will generate \$7.5 billion in economic activity in Dallas County supporting over 60,500 person years of employment paying in excess of \$2.8 billion in salaries, wages, and benefits (see Table 2). In addition, associated property income in the form of rents, royalties, dividends, and corporate profits will rise by \$728 million. State and local government revenues from property taxes, sales and use taxes, and license and permit fees associated with construction spending will be slightly more than \$175 million.

Table 2

Economic and Fiscal Impacts of Project Construction Activities

Description	Impact
Spending	\$ 4,944,500,000
Economic Activity	\$ 7,535,501,000
Labor Income	\$ 2,807,688,000
Employment (person-years)*	60,554
Property Income[@]	\$ 729,398,000
Indirect Business Taxes (state & local)[#]	\$ 175,151,000

* one job lasting one year; @ includes rents, royalties, dividends, corporate profits; # includes sales and use taxes, property taxes, license and permit fees.

Impacts of recurring spending

As noted above, once construction is completed the associated economic and fiscal impacts end as well. However, the new businesses and residents occupying and using the buildings and facilities bring new spending to the local economy. This is especially true for the Irving Conference and Event Center. In all, the projects listed above represent more than one million square feet of new retail space, 4.6 million square feet of office space—not including

¹ Does not include the purchase price of the building being occupied by Research In Motion (RIM).

RIM's headquarters—over 10,500 new multifamily residential units, 1611 single family residential units, and almost 1200 new hotel rooms.

In calculating our impact assessments, we have utilized a land use planning analysis tool developed by the authors to estimate total retail sales and business activity based on a given floor space of development. The model also includes estimates of the economic value of activities at public facilities such as civic centers. Retail sales and business activity levels are sensitive to the development type and the use of space. Our model specifies several different types of uses. Given market conditions, and allowing for adaptability in the development scenarios, we have chosen to take a moderately conservative approach in our business level assumptions. For example, though several upscale retail boutiques will likely locate in these developments, our overall average retail sales generation per square foot of space is more in line with those of power centers.

Our land use model also captures the spending by households occupying new residential developments. We have assumed that about 25 percent of the residents in the specified properties will be current Irving residents, a likely overestimate resulting in a conservative impact assessment. In addition, we have been careful to adjust our estimates to avoid double counting some impacts. For example, new residents will likely shop at the new retail boutiques, requiring an adjustment in total new retail spending associated with the combined households and retail establishments. Importantly, our impact assessment does not include operating impacts of the transit and commuter rail services.

Finally, we estimated visitor spending associated with events to be held at the new convention center. This spending includes lodging, food and beverages, and local transportation. Importantly, we decided not to include local retail spending by these visitors since much of that

spending is captured elsewhere in the analysis. Moreover, we adjusted our estimates to eliminate spending that is simply transferred to Irving from other Dallas County locations.

The spending estimates derived from our land use model were then used as inputs in the IMPLAN model, allowing us to estimate the broader economic and fiscal impacts of new residential, commercial, and office development associated with transit-oriented development in the City of Irving. In total, recurring spending associated with Irving's existing and planned transit-oriented development projects, when fully developed, will generate almost \$4.6 billion in annual economic activity for Dallas County (see Table 3). This activity will support more than 31,500 jobs paying \$1.9 billion in salaries, wages, and benefits. Property income in the form of rents, royalties, dividends and corporate profits will increase \$482 million. The revenues enjoyed by state and local entities from sales and use taxes, property taxes, and license and permit fees from indirect business activities will increase by about \$65.5 million, \$20 million of which will come to Dallas County taxing jurisdictions.

The developments included in this analysis will also contribute directly to local tax revenues. Based on our land use planning model, total direct property valuations, including business personal property values—less exemptions applicable to owner-occupied housing—will approach \$2.6 billion once all projects are completed. This taxable value offers the potential of more than \$36 million in new school district revenues annually with another \$14 million going into city coffers each year. Taxable retail sales at commercial establishments in the developments included in this analysis are estimated at about \$196 million per year. This brings total city revenue from direct sales and property taxes to almost \$16 million per year and will provide DART with almost \$2 million in annual revenue. It is important to reiterate that at every

step of this analysis we have taken a conservative approach. Thus, there is a reasonable likelihood that the actual impacts of these projects will exceed our estimates.

Table 3

Recurring Annual Economic and Fiscal Impacts of Urban Center Development

Description	Impact
Economic Activity	\$ 4,574,716,000
Labor Income	\$ 1,915,890,000
Employment (jobs)	31,538
Property Income[@]	\$ 482,230,000
Indirect Business Taxes (local only)[#]	\$ 64,977,000
Direct Property Tax Valuation	\$ 2,591,211,000
Direct School District Property Tax Revenue	\$ 36,044,000
Direct Sales and Property Tax Revenues for the City of Irving	\$ 15,968,000
Direct Sales Tax Revenues for DART	\$ 1,959,000

[@] includes rents, royalties, dividends, corporate profits; [#] includes sales and use taxes, property taxes, license and permit fees.

Impacts on Transit Service and Ridership

In considering the impact of altering the planned development of the Orange Line by eliminating a direct connection to DFW International Airport from the Belt Line Road station, we relied on reports prepared for DART and the North Central Texas Council of Governments. The first is the DFW International Airport Rail Planning and Implementation Major Investment Study published in December of 2002. That study examined several alternative routing scenarios including direct service to DFW from the Orange Line, having the Orange Line divert to Grapevine before turning into the airport, and forgoing a DART station, the so-called 13th station, at DFW in favor of connections using the proposed Cotton Belt commuter rail service or bus transfers. In all, the study provided detailed examination of 22 preferred alignments, 14 of which provided direct rail service to DFW from the Orange Line using either at-grade lines or a tunnel to reach a station located at the airport terminals. The study offered analyses of rider

convenience and the number of passengers each scenario would add to total ridership for the regional rail system.

On average, the 14 direct service options provide higher levels of rider convenience (54.5 percent versus 52.5 percent) and 1,944 additional daily riders over non-direct alignment options. A 2008 update of projected ridership² suggests that the direct service options will actually attract 2,354 additional daily system riders over non-direct service alignment options. This translates to almost 860,000 additional annual riders and more than \$3.6 million in fare box revenues for DART if the Orange Line ties directly into DFW from Belt Line Station. Recent history has shown that rising fuel prices can spark a boom in transit ridership. As the global economy recovers, it is likely that fuel prices will rise substantially and will to continue to increase over the long term. This implies that the passenger estimates presented here may actually understate the potential number of riders associated with Orange Line stations, including Station 13 at DFW Airport.

Table 4

Comparison of Service and Ridership Characteristics for Direct and Non-Direct Rail Transit Alignment Options Providing Service to Dallas Fort Worth International Airport

Characteristic	Direct Service	Non-Direct Service
Rider Convenience Factor (passengers and airport employees)*	54.6 %	52.5 %
Daily System Riders (2025)	303,778	301,834
Revised Daily System Riders (2025)[#]	367,571	365,219
Increased Annual Ridership	858,480	----
Increased DART Fare Box Revenue[@]	\$ 3,648,000	----

* Higher percentages indicate improve rider convenience # based on 2008 updates of ridership projected for 2030, extrapolated to 2025. @ Author’s estimates based on 2009 fare rates.

² Ridership updates are included in the report *Preliminary Engineering/Environmental Impact statement, Northwest Corridor LRT Line to Irving and DFW Airport, 2008.*

Other negative impacts from realignment / delays on completion of the DART Orange Line

As mentioned above, the DART Orange Line, as currently aligned, will provide the first rail service to DFW International Airport from downtown Dallas starting in 2013. This service is absolutely critical to the success of a number of redevelopment projects in Dallas' Central Business District (CBD), including plans for expansion of the Dallas Convention Center and a new convention center hotel. What's more, the ability to travel from downtown directly to the airport in 20 minutes can be a strong selling point for attracting businesses to Dallas' CBD, which currently records one of the highest vacancy rates in the country. Should access to DFW Airport from downtown Dallas be delayed by a number of years, and the journey lengthened because of the need to transfer to the SkyLink in Grapevine, the CBD's competitive advantages for business locations and convention activities could be seriously eroded.

Delays and realignment of the Orange Line could also have negative impacts on DFW Airport itself, especially in view of the financial difficulties facing the commercial airline industry. In 2008, domestic enplanements at DFW fell 4.7 percent while international enplanements dropped 3.3 percent. In 2009, American Airlines and other carriers at DFW are continuing to trim their flights, ensuring that enplanements will fall again this year and perhaps in 2010 as well. DFW International will face additional challenges when all perimeter restrictions are removed at Love Field in 2014. Having direct rail service from downtown Dallas to DFW is absolutely critical to ensuring that airport's long-term viability. Otherwise, Love Field may capture a growing share of the region's air passenger traffic in the years ahead.

Alterations and delays to the Orange Line could also make Las Colinas a less attractive location for business development, or at a minimum retard the pace of population and job growth. The most recent projections from the North Central Texas Council of Governments tag Las Colinas as one of the region’s fastest-growing job centers in the years ahead, with employment jumping from about 93,000 today to almost 143,000 by 2030 (see Table 4). This number isn’t likely to be realized if the alignment of the Orange Line is changed and the direct link between Las Colinas and DFW Airport is eliminated. While it is likely that any light rail route providing service to DFWIA will spark commercial and residential development, these developments would require several years for planning, land assembly, and tenant recruitment. Compared to the development that is ready to take place along the Orange Line, delaying the opening of the Orange Line in favor of an alternative route will delay the associated economic and fiscal benefits of TOD in northwest Dallas County by three to ten years.

Table 4

Population and Employment Forecasts for Irving, Las Colinas, and the DFW Metroplex , 2000-2030

Population Forecast:

	Forecast 2010	Forecast 2030	Change 2000-2010	Change 2000-2030	%Change 2000-2010	%Change 2000-2030
DFW	6,328,200	9,107,900	1,018,973	3,798,673	19.2%	71.5%
Irving	213,977	225,714	17,345	29,082	8.8%	14.8%
Las Colinas	31,525	38,203	6,459	13,137	25.8%	52.4%

Employment Forecast:

	Forecast 2010	Forecast 2030	Change 2000-2010	Change 2000-2030	%Change 2000-2010	%Change 2000-2030
DFW	3,897,000	5,416,700	738,800	2,258,500	23.4%	71.5%
Irving	219,495	276,941	54,060	111,506	32.7%	67.4%
Las Colinas	107,138	142,985	29,146	64,993	37.4%	83.3%

Source: North Central Texas Council of Governments.

What's more, the March 2009 Board Chair Report from DART Chairman Randall Chrisman noted that DART is likely to receive over \$61 million in federal funding as a part of the American Recovery and Reinvestment Act (economic stimulus plan) to be used for design and construction expenses of the Orange Line. Given that the federal government is targeting "shovel-ready" projects for this funding, delays caused by efforts to realign the Orange Line could put these dollars at risk.

Conclusion

The City of Irving has been an active member of DART since its founding more than 25 years ago and has patiently awaited the arrival of light rail service. Indeed, the city's comprehensive transit-oriented development strategy has been keyed to completion of the Orange Line to DFW Airport by 2013 under its current alignment. But a recent proposal from the Regional Transportation Council to realign the final section of the Orange Line and bypass the direct connection to DFW Airport would do serious economic harm not only to the City of Irving, but to the City of Dallas, DFW Airport itself, and other communities in Dallas County.

As the above analysis has illustrated, construction spending for all the TOD projects currently underway or planned in Las Colinas and other parts of Irving has the potential to pump more than \$7.5 billion into the Dallas County economy while recurring spending, once the TOD projects are built out, will have an annual economic impact of nearly \$4.6 billion. Tens of thousands of jobs will also be supported both during construction and after build out. But realigning the DART Orange Line and extending its completion date by five to ten years, while bypassing DFW Airport, will significantly diminish the potential economic and fiscal benefits we have estimated.

This is not just a City of Irving issue: a change in the Orange Line's alignment and completion date will affect all of Dallas County. Absent a direct and convenient rail connection to DFW Airport, downtown Dallas will lose some of its competitive edge when competing with other cities that have easy access to a major airport. A direct connection from DFW Airport to Irving and downtown Dallas is also critical for the long-run viability of the airport itself, since it will face growing competition from Love Field after all perimeter restrictions are removed in 2014.

Finally, completion of the Orange Line along its currently planned alignment—with a direct connection to DFW Airport—will generate greater ridership and substantially more fare box revenues for DART than would be the case with any proposed alternative alignments.