

## The Impact of Light Rail on Local Businesses

August 2, 2006

*A survey of experiences during and after light rail construction in six cities*

### INTRODUCTION

Considering the difficult experience many Houstonians had during the construction of the region's first light rail line from Downtown to the Medical Center, the Gulf Coast Institute recently explored the experiences of six big cities engaged in building new light rail transit systems. We selected the cities of Los Angeles, San Diego, Dallas, Portland, Minneapolis, and Salt Lake City, all of which have recently built their first line or added to their light rail system. We tried to reach representatives of the transit agency, the local government, and the business community, and in many cases developed leads to individuals who had first-hand experience during construction. This report focuses on the impact of light rail during and after construction on existing businesses close to the route.

As seen in Houston, light rail construction can have a disruptive affect on businesses, just as utility and street development does. Businesses abutting the roadway are especially at risk if the temporary elimination or blocking of driveways, sidewalks, ramps, or parking interrupts access by customers or suppliers. Businesses are also subject to periodic power outages and other utility service interruptions that are inherent in an infrastructure improvement project. Other disruptions may be caused by the diversion of traffic and reconfiguration of lanes, street lighting, traffic signals, and sidewalks.

Where such disruptions are prolonged, some businesses may experience reductions in sales revenue, particularly those dependent upon walk-up trade. Customers see such disruptions as obstacles to reaching the business and many opt to make fewer visits, to go elsewhere for services, and may continue this behavior long after all obstacles are removed. The appropriate level of assistance or other mitigation efforts is crucial to the public acceptance and ultimate success of a light rail system.

Where these effects have been successfully mitigated, the majority of businesses directly impacted by construction not only survive, but thrive once light rail service begins. Much of this evidence is anecdotal, but the city of Portland, which had the most extensive mitigation efforts, kept records on the affected small businesses as part of that effort and showed clear success. The few that do not survive are those considered very fragile at

the outset or those that opportunistically sell or relocate as a matter of choice. While some amount of business closure is inevitable, with or without rail or road construction, future transit development in the Houston area can be done in a way to ensure business has a fair chance of surviving.

Business owners report that businesses that seek out and maintain up-to-date information, anticipating and planning ahead for the changes and potential financial loss, are much more likely to weather the storm. Even businesses without the financial flexibility to rely upon capital reserves benefit from taking a proactive and planned approach to light rail construction, just as they might to any change in their business environment. But these businesses in particular appear to benefit from the support that well designed and implemented mitigation programs offer. Mitigation programs can take many forms but usually offer business assistance by providing financial, marketing, management, information, and communication support.

Such programs have been successful where an earlier project had been considered solely as a transportation improvement project rather than a neighborhood improvement project. Once these cities learned about the negative impacts, they exerted strong leadership, incorporated the many business concerns into their contracts as contractor criteria, modified their management processes to be more collaborative and responsive, and assured accountability for business impacts in their staffing structures.

Four of the six cities studied went through similar problems during construction of their first light rail line as happened in Houston. As a result, in each of those cities, either the transit authority, the local government, or the two in concert developed a mitigation program to lessen the burden of construction

The Gulf Coast Institute is developing resources to help inform the civic discussion about the alignment of the proposed University rail line on the west side of Main Street. The Institute was perhaps the earliest to call for looking at Richmond as an alignment option for this line several years ago. These studies strongly suggest that Richmond is the best option to achieve the strategic regional goal of linking our biggest activity centers with high-quality transit.

A companion paper on Mitigation of Business Interruption and other resources can be found at [www.gulfcoastinstitute.org](http://www.gulfcoastinstitute.org)

on small business, and that this made the difference in subsequent light rail construction. The two cities that did not report these negative effects during construction of their first lines, Dallas and Minneapolis, had adopted such mitigation efforts at the beginning. It became clear during our research that an additional report should detail the various mitigation efforts adopted by these six cities. That report, "*Light Rail Construction: Mitigation of Business Interruption*," is available at [www.gulfcoastinstitute.org](http://www.gulfcoastinstitute.org).

Representatives from transit agencies we spoke with were eager to offer stories and advice and to hear how the development of light rail in Houston progresses. Several invited us to visit their cities and tour their facilities and wanted us to extend this invitation to representatives of the Metropolitan Transit Authority of Harris County. Also, it became clear that several agencies regretted that they had not collected information on small businesses as Portland's TriMet had done. This data collection not only allowed TriMet to know how they affected the community, but also facilitated a productive working relationship with these businesses. This greatly alleviated "us versus them" problems. Several cities reported that they are following in Portland's footsteps in collecting this information, which will be useful in understanding the relationship of small business to light rail transit. Clearly, there is considerable benefit from collaboration among transit agencies, especially in developing best practices for mitigating the negative effects of construction.

Bruce Watts, Disadvantaged Business Enterprise Manager for Tri-County Metropolitan Transportation in Portland, says, "What helped this process in maintaining the neighborhood is the level of community involvement, which was very high. The meetings were not held at 2 pm or 11 am at City Hall. They were held in the community when residents and businesses were able to attend. They knocked on as many doors as possible to solicit input about what mix the community was looking for." Houston's METRO is already implementing some of these best practices we found in other cities, notably the community meetings occurring all over town, and is studying nearly all of these ideas. We expect the future construction of light rail in Houston to be very different from what has been seen here before.

## SAN DIEGO

The Mission Valley East Trolley Line (MVE), also referred to as the Green Line, opened to the public on July 10, 2005 and

closed a critical 5.9-mile gap in the existing light rail "Trolley" system. First envisioned by the Metropolitan Transit System (MTS) more than 25 years ago, the \$506 million project provides San Diegans with increased mobility within the busy Interstate 8 corridor. As one of four new stops built along the MVE extension, the San Diego State University (SDSU) underground trolley station has garnered local, state, and national attention as a gem in the region's transportation system. The SDSU facility holds the distinction of featuring the first subterranean trolley station and tunnel in San Diego.

The other new stops along the MVE extension include Grantville Station (which features a set of 40-foot-high elevated platforms and high-capacity elevators), Alvarado Hospital Medical Center Station, and 70th Street Station. Each station has a selection of site-specific public art. In addition, transit-oriented developments are planned along the route to co-locate residential and commercial projects around Trolley stations. The Green Line and the new state-of-the-art vehicles carry more than 18,455 passengers a day and have reduced the growth in traffic by potentially eliminating the use of 2,000 vehicles from San Diego highways. Twenty-five percent of current passengers formerly dependent on automobiles now use the new extension as their frequent source of transportation. The project has attracted over 2.5 million new annual transit riders in the region as a result of improved connectivity.

## Business Impact During Construction

The San Diego MTS is mostly on existing railroad right of way and predominantly does not run on surface streets. "When we go underground, there is no impact, but when we go overhead, there is a little impact because we have to build columns for the deep pilings and that requires blocking the streets. But there was nothing major. In fact there were fewer disruptions than in any other project," explained Jim Linthicum, engineer for San Diego Association of Governments (SANDAG - the Metropolitan Planning Organization).

"This project was not distinct in that there were the usual noise complaints, eminent domain disputes over property rights, and the like. These were managed well. I think another contributing factor was the fact that people could see something big and substantive being built," said Steve Celniker, the City's SANDAG Liaison.

Although this project involved heavy construction, "these

things never prevented people from accessing their businesses," said Grantville Station Project Manager Jim Hecht. "I don't know if they could ever show that they were impacted. There was one claim by a business for revenue losses, but after we requested to see his records, he dropped the case and we never saw him again. It was a Shell station but they had another one just across the freeway. This area at 70th and Alvarado was in the middle of the project and to get the trolley underneath the street we had to build a temporary deck over it and narrow the street down. The worst place was at a busy intersection where we were constructing."

The exception was one part of the project near San Diego State University, according to Celniker. Hecht concurred that near the SDSU area, the College Area Business Improvement District group had a lot of concerns. "There were a lot of small businesses that had a fear of the unknown. We explained how we were going to go through this and keep traffic moving. We made several presentations to them. This is how we will stage the construction. We had to close I-8 for 30 nights to build the structure over it with a full freeway closure. The SDSU area is where we had a detour 5 miles long in the city streets during that time period. We discussed that we have to do this, this is where it's going to be, and this is how it will work. We explained the traffic situation and gave them a guess at the time frame. Once they understood, they were not as concerned. They never came back to complain. In fact we never heard from them again."

Christina Kish, Executive Director of the College Area Business Improvement District (CABID), indicated that where the Trolley line comes out at SDSU, the 30 or so businesses in this district are not lined up exactly on the line. They are .2 miles away and a 2-minute walk from the SDSU transit stop, so the construction did not directly affect them. The owner of a pizza restaurant business that is located as close as you can get without being on the line or on campus confirmed that his business felt no particular impact, saying "we were well informed."

It seems the greatest need for mitigation measures was not for businesses but rather for the campus community. SANDAG had to negotiate with the SDSU campus to address "costly construction requirements to meet their needs for access," primarily regarding parking.

According to Celniker, a problem greater than mitigation concerns was the City infrastructure issues. There were signifi-

cant disputes over water and sewer lines and storm drains, not by residents or businesses but by the jurisdictional authorities. These disputes focused on the costs to relocate them and what level of design criteria would be applied to something being moved. For example, an old facility that had been there for decades would have to be rebuilt according to current design standards, which are much more costly, even though the introduction of the rail line caused this facility to be rebuilt. Compromises had to be reached between the City and the transit authority over what infrastructure would be rebuilt according to what standards and who paid for it.

The Mission Valley East Transit project design called for relatively minimal impact on local business, so MTS relied primarily upon their construction specifications, responsiveness to emerging issues, and communications efforts to mitigate any concerns. "Now where you have to close a whole city block it's a different issue, but we have never had a construction project where we had to do that," said Linthicum.

Mitigation was mostly in the form of contractor specifications such as not closing access, providing signs to direct people to the businesses, inexpensively moving driveways when necessary, and reducing noise and dust. "We made sure there were big signs so customers knew how to get to them and we kept down the dust and noise," said Linthicum. Hecht pointed out that the construction criteria are pretty routine. "We just provide a chart of when closures need to happen and we have the standard expectations like when they can't close off a freeway, or that they close only one driveway at a time etc."

For example, Tom Doogan of MTS explained that the area of the 70th street exit from I-8 is a flood plain, so they had to construct a box culvert to build the tracks over to avoid water. They also had to change entries and exits, widen lanes and put trolley tracks under an overpass. At Grantville they had an elevated station and a viaduct between Alvarado Canyon Road Station and the next major Blvd East where they had to build two lanes for auto traffic to connect to the station and to the business district. "These were managed well. I think another contributing factor was the fact that people could see something big and substantive being built," observed Celniker.

Linthicum provided examples of how concerns were addressed. "When we came to offices at the east end, it definitely made it more difficult. When it would be dusty, we would offer car wash coupons. When we came to a motel in the

middle of the alignment, we addressed their concerns. There were some homes for whom noise became a problem and we put them up in a hotel. For the San Diego State University dormitory we offered hotlines and coupons."

The Trolley station on the edge of the SDSU campus is the first underground station in the 57 mile system. MTS took citizens to LA to see their underground station to allay concerns about safety and the desire not to create a space for loitering.

"We designed in 24-hour security which we do not have at any other station." According to Toni Bates, a SANDAG Planner, there has also been substantial interest in the Grantville transit station's mixed use redevelopment plan. As it is already an established bus station, all parties, including redevelopers, the university, the community, property owners, and businesses, came together to agree on the character, architectural features, access, and design. "This process turned out well. There is plenty of support now for a station that initially the community didn't want at all."

Christina Kish, Executive Director of the College Area Business Improvement District stated, "We find we need to keep these businesses well informed because otherwise they panic. And often it is because they don't know what is going to happen or they are afraid of something they heard." Dan Cruz was the on-campus SDSU community relations representative for the Green Line project. He worked with the 40,000-student campus community to inform them about parking and routes to classes when roads, parking lots, or walkways had closures or other issues. The owner of the pizza restaurant adjacent to campus reports that, "We were well informed. A buddy of mine in charge of marketing sent us emails. We had meetings."

Linthicum recalled, "Twenty-five years ago on our first line we had opposition. But it was positive because people realized it was a short-term pain for a long-term gain and it was sold as that with 'Here comes the Trolley!' [1981]. But whether you're doing a highway or a trolley, any time you do linear construction, you have disruptions and no matter where you are you have to resolve those things. You always let them know, and you always keep your promises."

There was no documentation kept on complaints or issues that came up or were resolved, according to those interviewed. However, Celniker reports that he has not heard much publicly in the way of complaints. "There seems to be no leftover bitterness from this project as there often is on a project

like this. The project was seen as successful and it's popular because it exceeded public expectations. If there is any negativity it is being overshadowed by the popularity of it."

## **Business Impacts Since Service Began**

Transit that is constructed in existing right of way on railroad tracks, as much of San Diego's tracks are, has reportedly taken awhile to stimulate development. But the Mission Valley area was new right of way. "It has nearly taken off in residential, office, and hotel development," said Bates. But Celniker is withholding judgment; "I don't know about that yet." However, there are several TOD examples where there is private interest orienting toward the stations, including a 5-star residential development. "It may be that it would have been done anyway, but the light rail transit is an attractive feature."

For the Mission Valley West project, there was criticism that the Trolley stations were across the street and across parking lots from the establishments, which is not convenient for shoppers, but "I haven't heard that for the Mission Valley East. On the other hand, the Grantville Station is in the middle of an industrial employment area with a park and ride all around it. Another station is adjacent to a large hospital and across the street and across the parking lot from the hospital. But would any closer be too close? It's debatable," said Celniker.

The owner of the small pizza restaurant adjacent to the SDSU campus said, "The Trolley line has done well. I don't seem to get much of the transit traffic anyway. There's a lack of parking and not as many walk ins. It's actually working better for the franchise chains because as people not familiar with the area go by, they see a chain they are familiar with and when they get off that's where they head. That's a hardship on small businesses. But most of my business is not dependent on walk-ins. I have had steady customers. So for me there has not been much of an impact. We get the people that come in from the SDSU campus and not many others."

But this business owner is being impacted in another way. "I wasn't going to be particularly impacted, and as a result I don't have a spot in the new development." This owner was referring to the new mixed-use development project that is being planned at the Grantville Station on the SDSU property in partnership with the City redevelopment department. Original plans were to include many of the small businesses on or around campus that suffered during the construction. "They're

already knocking stuff down and restarting. My building is still standing and I have a few more years on the lease till 2011. They're calling up leases now. All the businesses actually were affected by the Trolley line. Those that 'went down'...they got the first spots. Then major franchises. I had a bit of a say in the new project, but they are giving preference now to the chains, and I can understand that because they have to be sure that with this new project the tenants are well established businesses and provide consistent service."

Kish reports that there has been a slight increase in walkable traffic but "we are not sure if that is due to the Trolley or to the increase in student enrollment at SDSU." She expects the redevelopment project that is now being planned will definitely enhance walkability because it will be a mixed-use development. Right now there are apartments and other miscellaneous buildings there. "But, to tell you the truth I am not a fan of the plan they have put in place. We think the existing businesses need to be substantiated for inclusion in that project. The effect that the current plan has is to get rid of those businesses that have been there and to put new ones in. They have been surviving and have their own clientele, and they need to be integrated in. We will fight for them to get into the mixed-use project. It is our stance that they need to be considered, and our success will be how well we can get the current businesses to be included."

According to Kish, affordability is now the issue of concern. Current space is about \$1.25-1.50 per square foot and the new project is pricing it at \$3-5 per square foot. "So it is clear that only the heavy hitters can afford it. They are pricing our small businesses out of their own area." The project has not been built yet. It has been on hold since November. An agreement has not been reached between the City Council and SDSU. The San Diego Research Foundation, a nonprofit organization, owned the building, but has turned it over, and the City of San Diego is looking for new developers.

There are about 30 businesses in that area. "We believe at least 50% of them can be maintained through this new development. Some could be weeded out - those that are barely making it now. But so many are anchors and are depended upon by their clientele for printing needs, class syllabus, and so on," Kish said. The majority (about 75%) are eateries and the rest are service-oriented businesses such as a tanning and hair salon, gas station, and 7-11. Other than the few chains, including Starbucks, McDonald's, and Jack in the Box, and a

moderate sized Mexican restaurant, they are mostly small businesses with 5-6 employees.

Dan Cruz, the campus community relations representative, while he has no statistics on impact, believes there may be some impacts since construction: While students once stopped by a campus coffee shop or ate in a campus sandwich shop for lunch, they can now hop on the transit and go downtown to shop or eat between classes. He wonders what impact that has had on the small businesses in between transit stops that used to have student walk-up traffic. But he could not definitively say it was impacting them.

## SALT LAKE CITY

The TRAX University Line and its recent extension to the University Medical Center opened in December 2000, ahead of schedule for the 2002 Winter Olympics. It used federal funding for the major infrastructure development and new right of way needed through a commercial and residential neighborhood. The University Line is a 2.3-mile branch connecting Main Street with Rice Eccles Stadium at the University of Utah. Unlike the initial route, which mostly used existing railroad right of way, the \$118.5 million University Line project required extensive, and costly, street work. In 2002 dollars, the cost for the University branch came to about \$53.3 million per mile. During the 2002 Winter Olympic Games, the Utah Transit Authority's (UTA) transit system was declared a success on an international screen, safely and efficiently carrying more than four million rider-trips by Olympic visitors who didn't cram more cars onto the city's crowded roads and freeways.

Like the original starter line, TRAX's University branch was quickly flooded with passengers. UTA put initial ridership on the new extension at 5,000 per day - about 900 rider-trips, or 22%, over original forecasts. The University Line's success continued in the fall 2002 semester. As a UTA news release reported, "students packed UTA TRAX trains at the Gallivan Plaza Station and at the four University Line UTA TRAX Stations this morning. 'We are using every UTA TRAX train out there to provide service on this line that has doubled projected ridership numbers in just eight months,'" said UTA Director of Rail Services Paul O'Brien, according to the news release.

The Medical Center extension opened September 29, 2003. The 1.5-mile, \$89.4 million line was completed 15 months ahead of schedule. With the benefit of University fund-

ing, it extends service to the University of Utah Health Sciences Center, weaving through an institutional rather than residential or commercial district, to further connect the University of Utah and downtown Salt Lake City.

## **Business Impact During Construction**

"We had a difficult time getting it approved because of Main Street and the experiences that businesses had there," said John English, General Manager of UTA. "There was a lot of resistance from business owners with concerns about disruptions and sidewalk changes."

Allison McFarlane, with the City of Salt Lake, said "Our first light rail line North/South down Main Street was completed in 2001 and was problematic for businesses. We were reconstructing our freeway system at the same time and the disruption caused people to give up on downtown. This was a lesson in how not to do it." By contrast, she said, "our next light rail line east/west from downtown to the University was very successful because we conducted an extensive mitigation program that made all the difference. This was a lesson in how to do it right".

Tim Harpst admits, "There was some impact. Our biggest concern was access. We had to remove on-street parking, so we had to add additional parking to make up for the loss...although many businesses have off-street parking lots. Going into the project, we purposely included some money in the budget to help offset access problems. I know there were a couple mom and pop store-front operations that were pretty fragile in the beginning that went out of business. They were a music store and take-out pizza restaurant."

The UTA is housed with the Chamber of Commerce. They did a lot of work to assure access to businesses and to mitigate disruptions. "However, some businesses clearly got hurt during construction," said Chuck Chappel, Executive Director of Wasatch Front Regional Council, said he got his information from reading complaints in the newspaper. There were problems with access. "The capacity of Fourth Street was restricted during construction (although it was restored after construction)."

While documentation of impact was not available from the Chamber, nor from any of the project partners, Allison McFarlane provided a list of businesses, including those on the Fourth South Corridor, that had received financial assistance from the City's revolving loan fund designed to compensate for revenue losses during construction. Interviews were conducted with the

owners of ten out of the nineteen loan recipients that could be reached for comment. Three of the loan recipients were not in business during the construction. Six out of the seven that were in business during construction, confirmed that the construction had a negative impact on their businesses, two of which did not survive the disruption.

The following are quotes from conversations with these business owners who had been the recipients of loans:

"We ended up closing because of TRAX," declared the owner of two businesses on 400 South. "We lost all our parking and there were no customers. There were 5 years of construction between Main Street and 400 South. It was a disaster. We tried to survive. We just couldn't. Dinner was completely dead. Our lunch is an 'all you can eat' buffet special. We can't make money on that for food and employees. But you can't let the employees go because how do you know when you will get busy? My husband worked 6 days a week but I could not because I have two small children. The loan wasn't enough. We also had to close our home decorating gallery on the 400 block at 57th. We put all the merchandise into storage and now we are paying for the storage. We're trying to find something else. We're looking in another area that is more affordable. We had the restaurant for 11 years and the gallery for 14 years. We closed them both in January (2006). Light rail is good for locals. It's a great thing but it's hurting, no, killing the businesses. All the parking in front of the restaurant is gone. There is no parking downtown. Parking is really expensive. We used to buy parking space but could no longer afford to buy it for us, much less our customers at \$50 per month. We used to buy tokens for our customers but even that became too expensive for us to do. [Our restaurant] was very well known in Salt Lake. The mayor used to come once in awhile for lunch. My husband is well known in the business community and we are concerned about this affecting his reputation in business. We could not afford the cost of rent for both businesses and employees. We had 4-5 employees for the restaurant we had to let go."

A corner convenience store owner had to replace lost revenue with a new venture: "TRAX had a very negative impact. We lost a lot. During construction, they blocked the intersection. Nobody was able to go through the intersection. The left turn lane was shut down from West to East. There was no left turn. During construction I lost almost 50% of my busi-

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ness. I was not able to regain for 3-4 years. I had to start thinking of other ideas to increase our business. So I made adjustments to the store. I added a grocery store and made it one half of the convenience store. I did not increase volume. It was good enough to keep us going."

Another restaurant had to try to retain customers with little available parking: "We lost revenue during construction because there was no parking. They took away all the public lots."

A small service-oriented business shut down for two years during the Main Street construction, which, the City admits, was not handled optimally, and then was impacted again by the University Line construction: "The City didn't do enough. We simply closed for 2 years. They gave us a little loan after we reopened. Then they shut us down again when TRAX went in the other direction (we're on a corner). I was able to keep [my business] because I closed for two years. I had another location. When the north/south line reopened then they decided to go east to the University right at my corner. There were businesses that were 30-40-60 years old. A clock repair business had been here 80 years. They didn't offer him any money. Nothing happened. The businesses just went dead. Two years is a long time to hang out. If I didn't have another location I couldn't have. As a business owner, I survived but where I could have been...well, let's just say I am not happy. And there are other business that would say the same."

A small restaurant owner acknowledged inconveniences but took them in stride: "I had been in business 4-6 months when construction started. I opened my doors and they took my road away! There was no real business during construction but I am from New York and it's a disaster there so I think everything went fine. The road access was actually fine too. They put notices up weeks in advance to let everybody know. Main Street was royally screwed up two years before. So many businesses on Main Street went down. But this was pretty quick. Oh, people complained, especially about the dust, but you could get in and out. It was barely closed. They would close the road at opportune times like the weekend."

**Business Impacts Since Service Began**

According to John English, UTA "did not do any before and after studies but I can tell you that there are more businesses now and high density condos are going up. The value of property is up and increasing numbers of people are accessing the

area. Apartments just sold overnight after light rail was up. Nobody criticizes that project. It is seen to have enhanced business." In addition, "New retailers, a specialty grocery shop, two large condos and apartment projects are all being developed and we're seeing more dense development, which we are wanting," said Tim Harpst.

Yet "even now there are vacant buildings along the line. A couple of businesses have moved out of there. On one corner lot there is an old brick building that remains vacant not far from a [light rail transit] station," observed Chuck Chappell of Wasatch Front Regional Council.

Addressing the University Medical Center extension, John English says, "We've had an extraordinary relationship with the University of Utah" with its regional Med Center, hospitals and housing. The University pays a set fee for an annual student pass on TRAX. Where UTA has 10-15% of the market overall, they have 30-35% market share at the University, where many parking lots have now been eliminated and converted to educational projects.

With regard to the specific impacts on existing businesses, Allison McFarlane points out "you can't turn left across tracks to the business but it hasn't hurt the businesses. Those who were adamantly opposed are now supporting it and those who were most fearful are our strongest advocates. They are wondering, 'How did we live without it?'"

When asked to clarify whether the new businesses were being given the same loan assistance that was being offered to existing businesses, Tim Harpst clarified that there were two programs on Main Street. One was the targeted mitigation assistance (described earlier as unqualified short term loans at 3%), and another involved incentive loans interest free for 1-2 years for new businesses to locate there, which had qualifications attached unlike the mitigation funds. "But those had nothing to do with the transit project," he noted.

Interviews were conducted with the owners of ten of the nineteen loan recipients. Three of the ten loan recipients were not in business during the construction. Of the eight businesses still operating today, two out of the three new businesses expressed generally positive experiences while four out of five of the original businesses expressed generally negative experiences in contrast to the pre-construction period. The following are direct quotes from these business owners"

A small eatery operator describes the change: "Sales were

better before construction. The business is doing okay now, though. The type of customers we see...they are not the same. To tell you the truth, it brings in the riff raff."

Another small restaurant is experiencing steady growth: "Our business is seeing increases of 25-30% every year for four years. But there are increases for everybody. I like saying to people that we're at the second TRAX stop across from the Library. But most people don't ride TRAX to get to my restaurant to eat. They take their cars so I'd rather see more parking on the street. Maybe one or two per month take TRAX. People take it to the Utah Jazz games and stop to eat here on their way to the University. It makes this a hub with the Library and the City/County building. It's a grounded area and I like that."

A small service oriented business has now stabilized and is doing well: "Business is good now, the economy has picked back up. I'm still paying the loan back, though."

Another small restaurant is still waiting to see some improvement: "It's been 2-3 years but it hasn't picked back up yet."

One of the original businesses unable to be reached for comment had a telephone recording inviting the public to come see three live entertainers at the restaurant/ club. Apparently it is still an operating business.

A small restaurant that opened after construction of light rail reports significant increases in sales: "Business is getting better and better. Local people are coming here on TRAX. We were seeing 5-10 people for lunch and 15-20 for dinner. Now we are seeing 50-80 for lunch and over 100 for dinner. We now open at 5 pm for dinner. It is still difficult to get parking downtown so people come here from downtown. The customers are different. Many don't want to pay the high gas prices so they are using TRAX. I use TRAX to get to work and to go downtown. Use of TRAX used to be very limited but it's full all the time now from South Park, Downtown, and University lines."

Another new business was a small restaurant whose owner was so busy he was unavailable. The manager indicated that they bought the business two years ago so they don't know about the experience during construction but business is now steady.

When reflecting on the past projects and the availability of documentation that measured results, John English acknowledged, "We realize now that we probably should have gathered more information. But, we have had little time to look back. People are now so committed to rail that they are demanding that we complete the planned projects over the

next 5 years rather than the next 20 years."

Allison McFarlane says the Mayor is advocating student housing downtown due to the light rail line. A study was done of five cities that had a university close to downtown. These cities examined how to tie the two together. "At a University of Pennsylvania Mayors' Planning Symposium, Mayor Anderson presented our study of how SLC tied our university to downtown with light rail. It was a study of transit-oriented development of that corridor in which there was underutilized land and vacant lots and how light rail has activated that corridor."

She notes that there will be a vote coming up in November 2006 in Salt Lake County to fund four more extensions to TRAX. Its presence would be more noticeable on the West side of the County. "There will eventually be some synergy to attract commercial activity around transit stops with a variety of them along the line. You'll be able to go from one stop to another and spread out the wealth. For example, a new soccer stadium made sure they got a new transit stop to go with it," she said.

## PORTLAND

The most recent extension to Portland's light rail system, Interstate Avenue MAX, serves long-established diverse neighborhoods with a strong sense of community. It has set new standards in participation by Disadvantaged Business Enterprise (DBE) firms and was a catalyst for more than 50 new businesses opening along the line as well as increased home sales. It was completed ahead of schedule and millions under budget, and has exceeded ridership of the former bus line serving the Avenue.

A variety of leaders made this extension process as painless as possible, but one key leader was Mayor Tom Potter, who issued a press release at the beginning that promised "No business will go under." This directive was in the minds of all players throughout the process.

Interstate Avenue was a former highway before a freeway went in during the 1970s and it had two lanes going both ways. The corridor represents a mix of long-established residential and commercial properties with a strong neighborhood identity among residents and business owners. "The area was somewhat run down. It had gone through its growth cycle, spiraled down, and then stabilized at some point," commented Joe Dennis, local business owner and President of the Interstate Avenue Business Association, which he initiated at the time of the construction of the light rail.

**Business Impact During Construction**

According to TriMet's documentation, there were 106 existing businesses operating directly on Interstate Avenue when construction got under way. Of this total, 42 (40%) were women- or minority-owned businesses. TriMet adopted a coding system to characterize the relative financial stability of these businesses in an attempt to measure and mitigate any negative impacts upon the businesses. They determined that 9 of the businesses were stable due to corporate or state ownership and 23 had a well-established customer base and appeared, or were known, not to depend upon impulse customers. The remaining 74 (70%) businesses were those that either appeared, or were known, to depend upon impulse customers or had not been assessed. Between 22 and 24 of these were new, small businesses considered most dependent upon impulse customers.

At the time construction was completed and light rail transit service began on Interstate Avenue, 51 new businesses had emerged while the status of 24 original businesses had changed. Of those original businesses, seven closed, 13 relocated, and four were under new names and ownership. Only three of these status changes were reported to have been attributable to the Interstate Avenue construction. Of these 24 original businesses, four had been initially assessed as relatively stable and not dependent on impulse customers, three had not been previously assessed and three were new start-ups during the period of construction. The remaining 14 were considered dependent upon impulse customers.

While seven of the original enterprises went out of business, only one was directly attributable to the impact of construction. It was reported to be a small retail shop selling vinyl music discs. The remaining six that went out of business were documented as not attributable to the impact of construction, two of which were women- or minority-owned businesses. They were as varied as a vacuum cleaner center, a security service, two hair salons, a catering service, and a restaurant.

Cascadia's Raymond Lanza-Weil, whose organization worked closely with all of the businesses along the Interstate Corridor to help them through the construction process, said, "Our study was able to ascertain that one of these business owners died, another retired, one business had not been previously assessed, and three were fragile small businesses that had been assessed as unstable at the outset because their management and accounting practices would not have

enabled them to withstand even slight market fluctuations."

Of the 13 businesses that had relocated by the time light rail transit service began on Interstate Avenue, 6 were operating in other known locations while the location of the rest could not be identified. Two of the relocated businesses with known locations were reported to have relocated as a result of the Interstate Avenue construction, one to another state. The others were considered unrelated business decisions. Four of the businesses were still operating in the same location and while their ownership had changed, the nature of the business had remained the same. They included a credit union, an auto care shop, a gas station, and a restaurant/bar.

The public participation process was initiated long before construction began. Joe Dennis, a local business owner, created the Interstate Avenue Business Association to represent the collective interests of the businesses along the corridor. "I became proactive as soon as light rail was announced, going to meetings to find out what was going on," said Dennis. "I got involved. I held monthly meetings for businesses to come talk to someone about what was going on. The businesses were all nervous. We were too. But when you get involved and hear what's going on, the fear subsides."

As he recalled the events at the time, he noted that there were "serious opposing groups," and when he stated at an early meeting of the Business Association, "we're going to be proactive and help businesses get through this," a third of the business people walked out and never came back. "So we brought people from businesses that had gone through a light rail project downtown to talk to us about their experience. Their message was 'get off your butts now because after the light rail comes in you won't be able to do anything. Be ready for the financial crunch.' And they were right. Anybody who planned for it, survived." Dennis acknowledged that "our business did not depend on walk-up trade and those that did had a more difficult time."

When asked what types of concerns business operators expressed in particular, he mentioned disruption due to problems with access and parking. When probing further to find out if trees, eminent domain, narrowing of streets causing traffic congestion, or anything else came up, he replied, "Yes, those were all concerns too. The question was whether one lane would support the traffic. We were all skeptical. The same traffic is still there but that traffic is flowing. They did a great job of creating parking, cutouts, left and right turn lanes. They took

out many trees but they put in many trees too. Different types of trees and in the islands etc. They had a group who did nothing other than work on trees."

After a pause for reflection he noted, "20/20 hindsight is always better. It's great to be at this side of the experience rather than where you all are in Houston."

He reported that "TriMet was always at the meetings listening to the people, and they learned what the issues were." For example, the owner of a downtown jewelry store who came to one of their meetings reported that people didn't want to go downtown and deal with the construction, so their business had barely held on during the period of construction. "TriMet understood that there needs to be a progression, not a regression in the way the construction process is handled. They told us that construction in front of our business would be limited to one to two weeks only. It was nothing like it was downtown. They improved the process. Whether it was the contractor or the management, I can't say."

"Response by businesses and residents was positive because the conduct of our construction was sensitive to their needs," said Gillian Detweiler, TriMet's Manager of Transit Oriented Development.

### **Business Impacts Since Service Began**

"The collaborative programs met the concerns of businesses," said Fred Atiemo, PDC business Program Manager. Considering that only one business failure and two relocations are directly attributable by TriMet to the Interstate Avenue MAX construction, the majority of businesses survived long enough to take advantage of the expected resurgence of commercial activity brought to the corridor by the light rail line. Recognizing that 51 new businesses have opened on Interstate Avenue since the beginning of construction, it would appear that commercial activity has regained its momentum.

Raymond Lanza-Weil, who continues to manage the loan portfolio at Cascadia [see the companion report "*Light Rail Construction: Mitigation of Business Interruption*," which is available at [www.gulfcoastinstitute.org](http://www.gulfcoastinstitute.org)], states that loan recipient businesses are "doing very well now," with the exception of one business that was among those reported to have failed. It was a small restaurant considered highly fragile before construction began, but which got loan assistance from Cascadia. All other loan applicants are thriving, Lanza-Weil said.

Four of the loan applicants paid back their loans well in advance of the term. One was a woman-owned silk-screen shop and another a woman-owned nail salon that took the opportunity to expand to be a day spa. They are reportedly doing very well and out-doing the new businesses that are creating competition. A Chinese restaurant now under new ownership has a new facility, new look, new menu, and was written up in the City's dining guide.

These businesses are now more visually appealing and that is having a ripple effect. A half mile away on Mississippi Avenue an old-time run-down commercial district 10 blocks long is now revitalized due in part to the light rail transit line. As the light rail was being planned, people were starting to invest on Mississippi. Once revitalization began, people started talking about redeveloping in conjunction with light rail. In turn, the light rail project helped to promote it also and it is said to be a revitalization success concurrent with the Interstate MAX.

Interstate Special Events, the company owned by former Interstate Avenue Business Association President Joe Dennis, took advantage of the low-interest loans and storefront grant assistance. The company has expanded to include more services, has outgrown its facility and is contracting for the sale of its property on Interstate Avenue, the value of which has doubled since light rail service began. The increased value of his property is allowing him to purchase new property and relocate the business, which he wanted but was not able to do before the light rail project. Gentrification, he points out, has its good sides. It does offer an opportunity to create wealth. "I am now able to purchase what I want because of the increase in value of my property." His advice to other businesses: "be proactive."

Also, at the North terminus is Expo Center. Expo was remodeled and rebuilt at the time light rail was being constructed. They have a much higher volume of activity now with easy access from downtown through the Interstate MAX connection. Is this increase in volume because of the remodeling or light rail? "Likely both," Dennis believes.

Exodus Spa received all three types of assistance, bought a house on the alignment, and turned it into a small business. "She will tell you that her business quadrupled since the light rail opened," said Lois Cortell, Operations Manager at Portland Development Commission. The results were "extremely positive," observed Bruce Watts. "There was more community support on the Interstate Line than ever before." concluded Ann Becklund.

While there was much positive response in the community about the way the Interstate MAX line was managed, there are still things to be learned and improved the next time around, according to those in Portland. Raymond Lanza-Weil believes that those businesses that applied for the 3% loans had the obvious capacity to grow and may have survived without it. "We turned one applicant down and made one risky loan. Others did not come to us. They weeded themselves out." He also said "the biggest obstacle was not TriMet or the ability to get a loan; it was fear of the unknown." He said, "People don't need money or other economic support. They need information to alleviate their fears or to focus their fears on what's really a threat."

Lanza-Weil offered an example of a small corner grocery store operator who was convinced light rail would ruin his business, that he had seen up to 60% drop in sales and expected no new customers from the rail since the train station was to be blocks away. When the facts were revealed that his sales had dropped only 15% and that a station was planned for construction directly across the street from his shop, he withdrew his application for a loan, chose not to do any storefront improvements in spite of a less than appealing storefront and merchandising. The business survived and remains there today.

Bruce Watts said that when he does national presentations, he talks about the fact that in the pre-construction stage, it's important to purchase property for staging construction that has future potential for the needs identified by the community. At station nodes, he says, property that may be available for construction staging would then be available for mixed-use, transit-oriented development. This property is valuable in controlling the flow of things because as soon as the alignment is announced, developers begin to speculate and you can't control it. "It becomes painfully clear that the inner city blight phenomenon is fading and transit-oriented development is making the difference. You have to be ahead of it. We leased property in some cases rather than purchasing and now that the infrastructure is in, property values are up, and it's more difficult."

"Interstate Avenue was not a prosperous street to begin with, so the City lagged behind on transit oriented station area development, said Sam Adams, Commission of Transportation for the City of Portland. "So we are now having to go back and change zoning to accommodate that. Other than that it has been very positive."

When discussing the optimal mix of existing and new businesses in a transit-oriented development project Fred Atiemo said, "Anybody who can give you a standard proportion doesn't know what he's talking about. It depends upon the area's sensitivity, history and many other factors. The most telling part is targeting certain landmarks that people use to help define themselves. If those are not preserved, you will have complaints and you will not succeed. You could have greater than 50% of the original properties preserved but if those landmarks are not, you have failed."

Bruce Watts agreed, "Landmarks are key to the identity of a neighborhood. Two key landmarks for the Interstate Avenue were the Interstate Firehouse Cultural Center and the adjacent Patton Park. With a lot of community involvement on the urban Renewal Advisory Committee (50 people or so) the process worked." He pointed out that Robert Bullard of Clarke University in Atlanta once stated, "Transportation equity is the new civil rights."

Portland is getting many requests for information about its Interstate Avenue line. It has become a model for success, so they are making the data freely available. The newly proposed Green Line is now in the planning stages. While following the same general approach, it will be a greater challenge because there are not the flexible funds that were available for the Yellow line. It was "a perfect storm of resources" that came together on that one. The question is whether PDC can come up with the money," pondered Bruce Watts.

"We consider ourselves somewhat progressive but we want to continue to learn about the best practices," he said. What is "vastly important is transit oriented development. "We are particularly interested in successful projects that have been built, especially with green technology."

## MINNEAPOLIS

Currently, Minneapolis has only one light rail corridor, the 12-mile Hiawatha Line which connects three of the Twin Cities' most popular destinations – downtown Minneapolis, Minneapolis/St. Paul International Airport and Mall of America in Bloomington. The 17 stations along the line are each fully ADA compliant, with ramps and tactile edges and elevators at stations on bridges. Major park-and-ride lots are located at the Fort Snelling and 28th Avenue stations.

Ridership, which comes from downtown Minneapolis, the University of Minnesota, 11 neighborhoods, Minnehaha Park,

Minneapolis/St. Paul International Airport, and Mall of America was 19,300 per weekday in 2005 and is projected to be 24,600 per weekday by year 2020. 46 Metro Transit routes connect to 14 rail stations with timed transfers. Twenty percent of rail customers arrive at their station by bus.

The 12-mile line is largely on the surface with about 1¼ miles of tunnel beneath the Minneapolis/St. Paul airport. The bulk of the line is in residential areas along Highway 55, as opposed to business areas. The Hiawatha Line right of way was acquired decades ago. Bob Gibbons, Director of Customer Relations/Public Relations with Minneapolis Metro Transit explains that "it goes through a residential area and was envisioned to be an 8-lane-wide roadway. The citizens rebelled and that project ended."

Subsequently, there was a study of light rail. When the Hiawatha Line was constructed, MetroTransit "didn't have to take anybody's house. We had to take hardly any property at all." Even though a line connecting Minneapolis and St. Paul has a projected ridership of 44,000 riders/day, the Hiawatha line was chosen as the first line because of the simplicity of building in this available corridor.

The rail comes into downtown Minneapolis past the Metrodome Stadium, where the Minnesota Twins and Vikings play, then passes on through downtown to the Warehouse District, where there are a number of restaurants. Gibbons reports that about 40% of people who worked in downtown Minneapolis used public transit to get to work even before light rail service began. That figure was 17% for the entire Minneapolis/St. Paul area.

Gibbons anticipates that the next rail route will likely be commuter rail running up north from downtown Minneapolis to Big Lake. This route will follow Highway 10, one of the state's most congested. The Hiawatha Line will extend four blocks to the north to hook up with the North Star Commuter Rail Line. \$60 million in funding for this line is being sought at the state level. The Central Corridor, from Minneapolis to St. Paul, will likely be light rail, although that is not decided yet.

The Hiawatha Line was built by the Minnesota Department of Transportation, is owned by the Metropolitan Council, and is operated by Metro Transit. A \$715.3 million venture, it was the first time in Minnesota that a project wasn't 100% designed before construction began. Instead, as Gibbons explains the approach was "Design/Build", "we designed 75% of the proj-

ect and had industry tell us how to finish it. This allowed us to get our shovels in the ground earlier." The line broke ground in January of 2001. Its first segment opened in June 26, 2004 – 8 miles and 12 stations. The remaining 4 miles and 5 stations opened December 4, 2004 – 27 days ahead of schedule. Gibbons said Metro wanted to give shoppers the opportunity to use the line to shop at Mall of the America's at its south end.

### **Business Impact During Construction**

MetroTransit formed a business association in downtown Minneapolis and held monthly briefings on utility relocation and disruption. They also instituted a 24-hour hotline for people to express concerns and similar monthly meetings as construction reached each residential zone. Gibbons said there are not a lot of examples of negative impact on business during construction. The bulk of the commercial disruption during construction occurred downtown along 5th Street where the street between City Hall and Hennepin County Center was permanently closed to create a pedestrian plaza.

The major difficulties during construction involved relocation of public and private utilities that ran beneath the right of way. Excel Energy, a major utility company, sued Metro, but lost. Gibbons said "there was a restaurant immediately adjacent to the Warehouse District that claims it went out of business during construction because of lack of customer access." However, he says it is questionable whether construction actually caused the closure. There is now a thriving restaurant in that same location and none of the other restaurants in the Warehouse District were negatively affected. Also, immediately adjacent to the failed restaurant is a furniture store that flooded. Construction workers punctured its foundation and water seeped into basement, damaging some of its inventory. Bloomington has a corporate office park, where Gibbons knew of no disruption.

Gibbons says the impact was modest because there was very little business to be affected along the route. The proposed Central Corridor route, on the other hand, would go down the center of University Avenue, a 30-mph roadway. Gibbons anticipates potential business disruptions when this line is constructed.

### **Business Impacts Since Service Began**

Gibbons cites Capp's BBQ, which is at the 50th St. Station, as a success story. The owner was adamantly opposed to light rail. However, he went to some other cities, did research, and

came back a light rail proponent. Gibbons reported, "His restaurant is thriving now and he credits rail."

Many existing businesses have reported more customers and increased revenues as riders patronize local venues near the stations. Prairie Dental, a downtown practice, now calls itself Nicollet Station Dental, and a farmers market was established within steps of the Lake Street/Midtown station. Near the line, two new grocery stores are planned on Hennepin Ave. in downtown Minneapolis.

"It's like free advertising," said Brett Mattson, owner of Capps, located at 50th Street and Hiawatha Avenue. "The train stops right in front of our building. People see our restaurant filled with lots of happy customers, and they decide they should check us out." Mattson fills an extra 10-15 tables each week as a result of light rail transit. "These are new customers," said Mattson, "and they say they'll be back."

Downtown Minneapolis restaurants have also seen dramatic impacts. "The Hiawatha is a wonderful, wonderful thing for downtown," reported Jim Burroughs, general manager of Old Chicago. The rail line "has brought people back to the city, and has had a tremendous impact on our business." Burroughs credits 75-100 customers per game to free light rail transit passes the restaurant provided during the 2004 and 2005 Vikings' seasons. According to Burroughs, patrons appreciate the convenience of the light rail. "They don't have to fight traffic, they don't have to pay \$25 or \$30 to park, and they don't have to worry about driving home," he said.

## DALLAS

Dallas Area Rapid Transit (DART) serves the Dallas/Fort Worth area with approximately 130 bus routes, 45 miles of light rail transit (DART Rail), 31 freeway miles of high occupancy vehicle (HOV) lanes, and paratransit service for the mobility impaired. DART and the Fort Worth Transportation Authority ("the T") jointly operate 35 miles of commuter rail transit (the Trinity Railway Express or TRE), linking downtown Dallas and Fort Worth with stops in the mid-cities and DFW International Airport.

DART is a hub and spoke system with all transit lines converging on downtown. Light rail runs both on the surface and in a tunnel and encompasses 45 miles of a planned 93 miles by 2014. The Fort Worth and Dallas transit systems together convey 100 million passenger trips per year. Extensions now in development include the 17.5-mile Northwest

Corridor, a 13-mile branch that will extend from the Northwest Corridor to DFW International Airport, a 10.2-mile extension to serve the Southeast Corridor. In addition, there will be an extension of service south three miles from Ledbetter Station to I-20 and northeast five miles to Rowlett.

Construction of Dallas' \$848.8 million, 20-mile starter light rail system began in 1990. In 2003, DART finalized Northwest light rail extensions to Farmers Branch, Carrollton, North Irving and DFW Airport, and the Southeast extension to Deep Ellum, Fair Park, South Dallas and Pleasant Grove. And, in 2004, Victory Station at American Airlines Center opened.

## Business Impact During Construction

A North Central Task Force (NCTF) was created to oversee the construction of the Blue and Red Light Rail Lines as well as renovating the Central Expressway. The NCTF looked at customer access in detail in the design of the segment. Its Chairman, Walt Humann, says that businesses typically thought that construction would destroy them. Dickey's BBQ, for example, thought it would be disastrous to be shut down during Thanksgiving, so DART shifted the schedule to accommodate the restaurant. Since DART was the single project manager – the single point of contact – it could tweak the design and modify the construction schedule to ease businesses' pain. If DART could not make changes to fit all of the business demands, at least the businesses had buy-in during the process. They understood why there had to be shutdowns.

Most businesses continued to have meaningful access. DART worked around their special events and did whatever else they could to help, without actually paying them. DART gave businessmen a number that they could call if they had any problems.

In the Central Business District, DART was authorized to shut down one lane during construction. It could allow businesses temporary access and still get its work done. The mall in the CBD took the place of traffic. Once DART addressed the access issue, the rest was pretty easy because, with the mall, traffic wasn't going to come back. Humann suggests that the Richmond Avenue option for the University Line is very similar to the transit mall in downtown Dallas on Lancaster. This segment has retail establishments flanking either side, cross streets crossing the DART line, and, in some parts, cars on either side.

Humann said downtown businesses, in particular, feared that construction drilling would destabilize their structures, but this didn't happen.

Lawrence Meshack, Manager of Community Affairs for DART, referred to only one entity that had issues, Thanks-Giving Square, a religious organization that worried that DART's end-product would disrupt their services. The construction part was noisy, but once service began, Thanks-Giving Square had no problem. The West End had no complaints.

Meshack said light rail didn't change the character of the neighborhoods at all. DART worked up front with historic groups to preserve what could be preserved.

Meshack estimates that business closures during construction amounted to no more than 10-15%. He says not all the closures were due to construction. Some businesses closed even after construction was completed because they were marginal operations. DART worked first-hand with the businesses during construction. When DART went underground, there were problems with service interruptions and floods. Humann said one firm had been in bankruptcy and come out of bankruptcy. It went into bankruptcy again and tried to blame it on DART construction. The NCTF took the firm to task on this accusation, as the failure was not due to construction.

Humann believes the involvement of the task force in every stage of design and implementation was beneficial. All parties were brought to the table early and provided with all necessary information to achieve a buy-in as partners in the project. Businesses were contacted well in advance and told what to expect and when, and constant communication was maintained during construction, with efforts on the part of Metro to ameliorate adverse construction impacts. With clear understanding of what was going to happen, when adverse disruptions are necessary, and best efforts on the part of Metro to mitigate them, businesses were less likely to develop an "us versus them" attitude.

### **Business Impacts Since Service Began**

The Akard station is near Thanksgiving Square. Other CBD stations are near a hotel and TXU Energy and a bank and restaurants. Meshack said the downtown businesses welcomed light rail. They felt it complemented their businesses and their appearance, as well as improved their access. Humann notes that downtown Dallas was in decline before light rail construction. He believes that there has been positive improvement along the downtown transit mall. There are more viable retail shops and office buildings. He points to the Adams Mark hotel,

stating that its renovation would not have occurred without light rail. The hotel's website clearly notes that there is a light rail stop in front of the hotel.

Meshack believes that the impact of transit has evolved since service began, mainly in service delivery. DART was the first system in the region and DART was new to the game of running a downtown mall. Adjustments were made after service began. Large conventions came to town based upon the ability of light rail to get their participants around town. The American Airlines center was erected for basketball and hockey.

In South Oak Cliff, new stores sprang up. Light rail transit was delivering bodies. Some businesses expanded and the area became a better place to work and conduct business. DART's ultimate economic vision for light rail was not totally realized, but Meshack rates it 80% successful. It has brought in more visitors to Dallas. The VA Hospital, with its own station, has expanded and made a dramatic improvement in its facility. Many veterans use light rail to reach the hospital. The West Oak Cliff line serves the Dallas Zoo, which Meshack says is a success story in itself.

Unlike the North Central Corridor, the light rail line extending south from downtown Dallas along Lancaster Avenue was all at grade. Humann says that there was quite a bit of business/customer "grousing" about access problems. He attributes this to the fact that the NCTF was not working in this area during construction. He believes that, had the NCTF been working on this segment during construction, there would have been less grousing. He adds that "after the fact, this is the place to be."

### **LOS ANGELES**

The Los Angeles County Metropolitan Transportation Authority (also known as Metro, MTA or LACMTA) is the regional transportation planning and public transportation operating agency for the county of Los Angeles. Metro operates the third largest public transportation system in the United States by ridership with a 1,433-square-mile operating area and 2,000 peak-hour buses on the street any given business day. Metro also designed, built, and now operates 73.1 miles of urban rail service.

The \$740 million, 13.7-mile Gold Line, which opened on July 26, 2003, is Los Angeles' fourth light rail service and expanded Metro Rail to 73.1 miles.

Operating on the former right of way of the Atchison Topeka and Santa Fe Railway (AT&SF), the Gold Line links

Union Station in downtown Los Angeles to Sierra Madre Villa in East Pasadena via 13 stations, including Chinatown, Highland Park, South Pasadena, and Pasadena. This right of way was purchased in the early 1990s Metro in anticipation of extending the light rail system east through the San Gabriel Valley. The trains start out on an elevated rail line between Union Station and Chinatown, and subsequently traverse the Los Angeles River and the adjacent Golden Freeway before serving the hillside communities just north of downtown.

The line runs underground for a short segment, after which it runs in the median of local streets in the neighborhood of Highland Park. After crossing the Pasadena Freeway using the historic Arroyo Seco Bridge, built in 1895, the Gold Line serves the city of South Pasadena, before moving on to downtown Pasadena. This part of the line contains a much longer underground segment of almost half a mile, where the line passes under Pasadena's main thoroughfare, Colorado Boulevard. The Memorial Park station, just beyond Colorado Boulevard, is below grade. The last leg of the Gold Line runs through the median of the Foothill Freeway, terminating at Sierra Madre Villa station.

Trip time from East Pasadena to downtown Los Angeles is approximately 36 minutes. More than 150,000 riders boarded Gold Line trains during its first weekend of operation. At 15,300 average weekday boardings, Gold Line ridership has been below official projections, which has resulted in cuts in service during the middle of the day and at night. Future extensions will be the Eastside and Foothill Extensions that will be completed in 2009 and 2010, respectively. Once the Foothill Extension is completed, a trip from Montclair to downtown Pasadena will take a little over 40 minutes, making the trip from Montclair to Los Angeles approximately 75 minutes.

### **Business Impact During Construction**

Because the Gold Line followed the long-standing railway right of way, there appears to have been little impact upon existing businesses during construction. Neither the Los Angeles Greater Chamber of Commerce nor the Los Angeles Economic Development Corporation was aware of any data regarding the impact of Gold Line construction upon businesses. The Gold Line passes through the city of Pasadena, California, very near the heart of "Old Pasadena," commonly referred to by the local residents as "Old Town". John Catalina, External Affairs Manager of the Pasadena Chamber of Commerce, confirmed

that, because the Gold Line followed the AT&SF right of way, there was very little disruption to business. "Nothing was uprooted. Only one area around the Memorial Park station in Pasadena suffered a particularly negative impact." As the Memorial Park station "went below grade, there was a great deal of excavation" at that site.

The Memorial Park station is situated on the northern and eastern edge of historic "Old Town" in and beneath the existing Holly Street Village Apartments, which were constructed in 1994 in anticipation of a light rail station at this site. John Catalina, of the Pasadena Chamber of Commerce, says the only business he knew of that was "severely impacted" during construction was the Holly Street Bar & Grill, an upscale bar and restaurant located on the same street as and just east of the Memorial Park station. The restaurant's owner, Alexis Nassis, says that, during construction of the station, Holly Street and access to her restaurant were blocked for a couple of years. Not only auto, but pedestrian traffic was impacted. She says she lost a lot of business, but is not dollar specific. Asked if she knew of other businesses that were affected by Gold Line construction, Nassis replied there may have been some, but that "there are not many businesses in my area."

The Eastside Extension, which is currently under construction passes through three communities: Little Tokyo Arts Heights, Boyle Heights, and East Los Angeles. The alignment goes down 1st Street, which is a main thoroughfare to downtown Los Angeles for commuters from East Los Angeles. Robles says the Eastside Extension has an excellent contractor who is very cooperative and provides timely information to Metro's community relations team so they can coordinate construction with the community. Robles and her people are out in the community on a daily basis. Neighborhood residents know that they can contact any member of the community relations team 24 hours a day.

Robles' team also works with each business feeling a financial impact as a result of the construction. They do a small marketing campaign for these businesses in an attempt to bring in new customers. Metro assistance includes hiring graphic artists to create flyers and distribution of these flyers. Additionally, LACMTA tries to get east side businesses to be part of light rail construction – either on the Eastside project or at another level. It also provides a job program to help the local workforce.

Boyle Heights, where most of construction has taken place during the last 1½ years, is one of the oldest communities in Los

Angeles. The neighborhood along this stretch of the alignment is mostly mom-and-pop stores with housing on top of the commercial buildings. Few of these businesses have off-street parking. What they have is mainly for tenants, not the business owners. The alignment in Boyle Heights is narrow, so most of the impact on businesses in this area relates to parking. Construction equipment competed with traffic for mobility and Metro had to restrict parking on about two blocks of 1st Street in Boyle Heights.

Metro needed this area to get boring machines underground. This required pile installation and decking to create a temporary street. Loss of street parking has impacted these businesses. Robles said they are experiencing a loss of clientele. Many of their customers are commuters used to dropping off their cleaning or picking up take-out food on their way home from work. In order to avoid the construction, many of these commuters are changing their route to go down 3rd Street instead of 1st Street.

Those customers that patronize the 1st Street businesses have to battle for parking spaces. While there are side streets where customers can park, whether people will do so depends on how far they are willing to walk. One mitigation idea that Metro came up with was to lease vacant lots on a monthly basis for these businesses to utilize for parking. This turned out not to be viable because land in this area is very scarce. However, one block north of 1st Street is a street that is very wide. Metro did a study to see if it could convert parking on that street to angled parking and got approval to do so. This resulted in a net gain of 28 parking spaces on the parallel street, which is more than the number of spaces that have been lost on 1st Street due to construction.

For four or five weekends, Metro closed two to three blocks to excavate for the two underground stations. To minimize the parking problems experienced by residents during these weekends, Metro notified the community well in advance of the closures. Robles' Community Relations team conducted door-to-door briefings. Metro circulated construction notices to a wider area than the immediate neighborhoods so commuters would also be notified. The team helped residents find alternative parking, made sure that people were safe getting to and from their cars, and made accommodations to escort residents to and from their homes, if necessary. Construction noise was mitigated with sound blankets and construction lights were redirected to minimize residential disruption.

## **Business Impacts Since Service Began**

Alexis Nassis, the owner of the Holly Street Bar & Grill near the Gold Line's Memorial Park Station, says that the initiation of Gold Line service has not alleviated her financial difficulties. She complains that there has been no signage and no advertising, either during or after construction, to direct riders to her restaurant, saying "everyone getting off at the Memorial Park station is directed toward Old Town [which is west and south of the Memorial Park Station]. They don't go left. They either go straight or right."

Other than this instance, there is little information available about the business impact of the start of Gold Line service.

John Catalani, at the Pasadena Chamber of Commerce, maintains it is the new businesses that have benefited from light rail service. This appears to be verified, at least in Old Town. Ellie Ramseyer, at the Los Angeles Greater Chamber of Commerce, describes Old Town as "a run-down area that got rejuvenated after the Gold Line started service." Old Pasadena's website indicates that Old Town's rejuvenation took place a little earlier - in the 1990's. However, Old Town's uptick in economic activity was probably, at least in part, stimulated by expectation of light rail service to the area. This is evidenced by the 1994 construction of the Holly Street Apartments in anticipation of a light rail station at that site.

While the actual impact upon existing businesses can't be determined until after this extension's completion in 2009, Metro's Robles expects it to be popular like the Blue Line because of the density and transit dependency of this area of Los Angeles County.

*This report was prepared by David Crossley, Jay Blazek Crossley, Rick Cagney, and Geri Wells.*