FINAL ENVIRONMENTAL ASSESSMENT

for the

PROPOSED DOWNTOWN TUCSON INTERMODAL CENTER

Prepared by: City of Tucson, Department of Transportation Planning Division

For

FTA Region IX

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### Table of Contents

**Chapter I: Project Overview and Description** ................................................................. 4  
A. Project Description and Location .................................................................................. 4  
   Project Location ............................................................................................................. 4  
   Project Description ........................................................................................................ 4  
      Restoration of the Main Tucson Depot Buildings .................................................. 8  
      Creation of an Intermodal Parking/Greyhound Bus Facility .............................. 11  
      Pedestrian Bridge ..................................................................................................... 12  
      Depot Plaza .............................................................................................................. 13  
      Pennington Triangle Building ............................................................................... 14  
      Ronstadt Transit Center ......................................................................................... 14  
      Railroad Tracks ........................................................................................................ 14  
      Parking Facilities ...................................................................................................... 15  
      5th Avenue Realignment ......................................................................................... 15  
      Trolley Maintenance Area ...................................................................................... 15  
B. Project Purpose and Need .............................................................................................. 15  
   Purpose .......................................................................................................................... 15  
   Need .............................................................................................................................. 16  

**Chapter II: Alternatives Considered** ............................................................................ 20  
A. Do Nothing .................................................................................................................... 20  
B. Depot Gateway Vision Plan ........................................................................................ 20  
C. City Hall Focus ............................................................................................................. 21  
D. Mixed-Use Development (Downtown Tucson Intermodal Center Master Plan) .......... 21  
E. Preferred Alternative .................................................................................................... 23  

**Chapter III: Social, Economic, and Environmental Impacts** ...................................... 26  
A. Land Use, Acquisition and Potential Relocation ........................................................ 26  
   Mitigation ....................................................................................................................... 28  
B. Minority Considerations and Environmental Justice ................................................. 29  
C. Social Considerations (Parks, Schools, Emergency Services, Transportation Services, Neighborhoods) ........................................................................................................ 30  
   Transportation Services - Traffic ............................................................................. 30  
   Transportation Services - Parking ....................................................................... 32  
   Transportation Services - Pedestrian/Bike ............................................................ 32  
   Community Disruption (Parks, Neighborhoods, Schools) ..................................... 33  
D. Economics ..................................................................................................................... 34  
E. Hazardous Materials .................................................................................................... 35  
F. Air Quality ..................................................................................................................... 37  
G. Noise Analysis ................................................................................................................. 40  
   Traffic Noise Criteria ................................................................................................. 40  
   Traffic Noise Prediction Method ............................................................................... 41  
   Traffic Noise Verification ............................................................................................ 41  
   Prediction Locations for Detailed Analysis ............................................................. 42  
   Traffic Noise Prediction Results ............................................................................... 44  
   Discussion of Predicted Traffic Noise Levels and Comparison with FHWA Noise Guidelines ................................................................................................................. 44  
   Traffic Noise Mitigation Options ............................................................................... 44
List of Figures

1. State Map .............................................................................................................. 5
2. Vicinity Map ......................................................................................................... 6
3. Original Alternative Master Plan Concept ............................................................... 7
4. Updated Master Plan ............................................................................................. 9
4A. Ronstadt Transit Center Development Concept .................................................. 10
5. Land Use Inventory .............................................................................................. 27
6. Hazardous Materials Map .................................................................................... 38
7. Noise Prediction Locations ................................................................................... 43
8. Noise Impact Criteria for Transit Projects ............................................................. 45
9. Tucson Warehouse District .................................................................................. 52

List of Tables

1. Criteria For Evaluation Of Site Alternatives .......................................................... 22
2. Study Area Demographic Data ............................................................................. 30
3. Existing and Future Levels of Service, PM Peak Hour ........................................... 31
4. 2010 Levels of Service w/ Project, PM Peak Hour ................................................. 31
5. National Ambient Air Quality Standards .............................................................. 39
6. FHWA Noise Abatement Criteria ....................................................................... 40
7. Measured and Predicted Noise Levels during Peak Traffic Hour at the MLK Building on the NW Corner of Congress and 4th Avenue ......................................................... 42
8. Predicted Loudest Hour $L_{eq}$ for Existing, Future (year 2025) Build, and Future (year 2025) No Build Conditions ........................................................................... 44
9. Predicted Transit Noise Levels for Existing, Future (year 2025) Build, and Future (year 2025) No Build Conditions ........................................................................... 46
10. Typical Construction Equipment Noise Levels ..................................................... 47
A. Project Description and Location

Project Location

The Downtown Tucson Intermodal Center project is an inclusive multi-modal community plan involving improvements to the Historic Depot District. The City of Tucson has a population of about 500,000 in a metropolitan area of over 800,000 people in Pima County, Arizona (see Figure 1, Location Map). The project area is located in the downtown business, warehouse, and arts district, east of I-10. Project boundaries are 6th Street to the north, Congress Street to the south, 4th Avenue to the east, and 6th Avenue and Scott Avenue to the west (see Figure 2 Vicinity Map). The Historic Depot District is named for the Union Pacific-Southern Pacific Depot (Depot) built in 1907, and is the focal point of the transportation improvements in the project area. The project lies within the Rio Nuevo Multi-purpose Facilities District.

Project Description

The Downtown Tucson Intermodal Center concept was designed to fulfill specific actions outlined in the City Center Vision and Strategic Plan (City Plan) adopted in November 1994. The City Plan included developing a plaza and pedestrian spaces in the Hotel Congress-AMTRAK-Ronstadt Center triangle, increasing area parking, and developing an intermodal center. The objective was to encourage more people to use this downtown area (Downtown Tucson Intermodal Center Master Plan 1999).

The Downtown Tucson Intermodal Center design meets the criteria identified by the City Plan. The Intermodal Center provides for: 1) creation of an intermodal transportation center, 2) additional parking in the downtown core, and 3) development of a functional and attractive system of public open spaces linked by pedestrian circulation.

The Downtown Tucson Intermodal Center Master Plan as approved in 1999 consisted of nine (9) elements that are within the study area of this Environmental Assessment (EA). They include:

1. Restoration of the Main Depot buildings (restoration of the four Depot buildings is completed and tenant improvements are underway)
2. Removal of two non-historic railroad buildings (completed)
3. Development of a 10,000-20,000 sq. ft. restaurant/commercial pad
4. Relocation of the Historic Locomotive 1673 (completed)
5. Creation of a mixed-use/intermodal parking/Greyhound Bus Facility
6. Addition of a pedestrian bridge across railroad tracks
7. Creation of a Depot Plaza
DOWNTOWN TUCSON
Intermodal Center Master Plan

The Intermodal Facility replaces parking spaces lost with the progress of the Barraza-Aviation Parkway.

The Ronstadt Transit Center should be extended north across Pennington and integrated into the Pennington Triangle Building.

The three associated small buildings northwest of the Depot should be rehabilitated and restored for use as a transportation museum with specialty retail and/or office space.

The Tucson Depot with its associated buildings are the centerpiece to the Historic Warehouse District. They should be restored to the 1941 era for larger usable space.

The Depot building is programmed to house: Amtrak, Arizona Shuttle, Old Public Trolley, Arizona High-Speed Rail. Shared facilities include the ticket counter, baggage storage, public areas and a restaurant.

The arcades of the main Depot will be reopened and will mark the primary pedestrian route along the facade.

The Depot Plaza is the forecourt of the historic buildings.

The location of the public plaza invites pedestrians into the heart of the Intermodal Depot District.

A third set of tracks (minimum) should be reintroduced to allow for expanded passenger rail service.

Development opportunity site should be part of the critical mass necessary for economic revitalization.

On-street parking should be redistributed to defined parking lots and structures. The streets should be narrowed and lanes defined directing motorists and buses efficiently through the district. Intersections should be reconfigured for perpendicular alignment of streets where possible.

Historic Fourth Avenue Underpass for pedestrian and bicycle access to Downtown Tucson.

Hotel Congress and associated retail and entertainment venues are critical members of the Depot District.
8. Creation of a “Pennington Triangle” building
9. Demolition of the former City Hall Annex building, and development of a parking garage (currently in the final phase of development)

The original Master Plan is shown in Figure 3.

An Environmental Assessment addressing the Master Plan was prepared by the City and approved by the Federal Transit Administration (FTA) on August 14, 2000. The FTA issued a Finding of No Significant Impact (FONSI) for the Downtown Intermodal Center. Since 2000, additional related project elements or modifications have been identified in the area. The new items are:

1. Addition of a third set of railroad tracks at the depot (spur line) and a passenger platform
2. Demolition and reconstruction of the Martin Luther King (MLK) Building
3. Addition of a Multi-use facility on Congress Street adjacent to the Ronstadt Transit Center (RTC), including changes to the RTC to retain the same number of bus bays.
4. Construction of three parking facilities: a 749 space multi-story garage at 6th Street and Pennington (former City Hall Annex); construction of a small surface lot east of the Depot off Toole and parking facility associated with the relocated MLK Building
5. Realign 5th Avenue at Toole Avenue
6. Removal of the recommendation for an additional 10,000-20,000 square-foot restaurant/commercial pad site
7. Consideration of alternate locations for the relocated Greyhound Bus Station.

The Updated Master Plan is shown on Figure 4 and 4A.

The 2000 EA and subsequent funding for the Downtown Intermodal Center initiated construction of several elements of the original plan. Elements that have been undertaken or are near completion are:

- Main Depot Restoration was essentially completed in May 2004
- Two non-historic railroad buildings have been removed (2003-04)
- Historic Locomotive 1673 has been relocated on site under a fenced ramada (2003)

Other original plan elements have not yet been constructed; including the depot plaza, Pennington Triangle, pedestrian bridge, intermodal parking/Greyhound Facility, and restaurant/commercial pad. A description of the individual project elements and the consistency or differences between the original plan and current Master Plan are noted.

Restoration of the Main Tucson Depot Buildings

The Historic Depot and its associated elements have been essentially completed. The restoration of the Depot into an active intermodal center is expected to be a catalyst for the rejuvenating efforts for this area of downtown Tucson. The depot building has three major periods of development—its original construction in 1907, major renovations in 1941, and various post-1951 renovations that exist today. The restoration of the historic buildings to the 1941 condition was completed in Spring 2004, with funding from FTA and the City of Tucson (City).
Figure 4 – Updated Master Plan
The project calls for the following transit providers to be housed at the Depot:

- AMTRAK
- Arizona Shuttle (future)
- Trolley (future)
- Arizona High-Speed Rail (future)
- Tucson Inner City Express Transit (TICET) (future)

The Historic Depot consists of four buildings: 1) The main building (located on the southeastern portion of the property), 2) A retail center (located just northwest of the main building), 3) An office building (northwest of the retail center), and 4) The Southern Arizona Transportation Museum (located southwest of both the office building and the retail center). The renovations to the depot main building include ample ticket counter space and public facilities for current and future intermodal entities. There is space on the southeast side for a restaurant. The entrance to the tunnel used for boarding passengers has been covered for use by a restaurant until future needs dictate a passenger use. The tunnel is still accessible via the outside entrance and currently houses electrical and mechanical equipment for the depot main building. The second floor has been modified to accommodate several offices. The depot main building also has new electrical, plumbing, and mechanical systems.

The remaining three buildings have newly renovated exteriors, but are still undergoing tenant improvements and interior renovations. Other improvements to the depot property include: landscaping both in front and in back of all of the buildings, the removal of two modular buildings on the southeast corner of the property to enable the construction of a new parking lot, and construction of a ramada for the historical locomotive located just behind the office building. Locomotive #1673 is a Mogul 2-6-0 steam engine built in 1900. The locomotive provided freight and passenger service in Southern Arizona and Northern Sonora. In 1955, it was retired from service and donated to the citizens of Tucson by Southern Pacific Railroad, where it was put on display at Himmel Park. The locomotive was listed on the National Historic Register of Historic Places in 1992. The locomotive was moved to its current location after the Master Plan was approved by the Mayor and city council in 1999.

Landscaping has already been completed at the Depot. New concrete has been poured and small trees and shrubs have been added to the entrance side of the Depot and the passenger boarding side. A wrought iron fence also exists in the back of the depot to serve as an attractive way to keep patrons safe from the tracks lying on the other side.

The Depot renovations and improvements were built using FTA and city funds as a component of the previously approved EA.

**Creation of an Intermodal Parking/Greyhound Bus Facility**

The land northwest of the Depot up to 6th Avenue, historically housed private railroad cars utilizing the private car spur. It is currently an unimproved parking lot for up to 84 automobiles. In Figure 4, the site is noted as G1. The *Tenth Street Plaza Multi-Use Parking Structure* study September 8, 1997 identified this site as the preferred location for a parking structure based upon the following criteria:
Environmental Assessment
Downtown Tucson Intermodal Center Master Plan Update, 2004

- Vehicular access
- Pedestrian linkage
- Transit linkage
- Rail linkage
- Inter-city bus linkage
- Design opportunities
- Design options

The original Master Plan recommended the site become a combination Intermodal Parking Garage and the new Greyhound Bus Terminal.

- The Greyhound Bus Terminal would occupy nearly the entire ground level of the facility with three levels of parking located above both the terminal and bus parking area. An access ramp for the parking facility would be located on the east side of the facility. Vehicles would enter the parking facility by driving up a ramp located on the south side and would exit to the north by driving down an exit ramp. Likewise, buses would enter on the south side and exit to the north in order to minimize bus and automobile conflicts.

- The 255 space parking facility would provide replacement parking for the parking spaces that would be eliminated for this development. It would also satisfy new parking demand generated by the Pennington Triangle mixed-use building, the renovated Amtrak Depot, nearby historic buildings such as Hotel Congress, and other buildings located within its market area.

The current Greyhound Terminal at Congress Street and 4th Avenue must be relocated to accommodate the new 4th Avenue Underpass project slated for construction in late 2004/early 2005. Greyhound and the city have agreed on a temporary location. Several sites were under consideration in the vicinity of I-10 and downtown Tucson. A potential location at I-10 and 25th Street was dropped from further consideration due to neighboring City of South Tucson objections and lack of support from area residents and interested parties. The selected temporary site is at I-10 and St. Marys Road. The cost to temporarily relocate Greyhound is funded through the 4th Avenue Underpass project, no FTA funds would be used for this temporary action. Further discussion of the Greyhound project element is found in Chapter II, Alternatives Considered.

The G1 site remains a potential site for the permanent location of Greyhound. The Tucson Mayor, City Council, city staff, and the Depot Plaza Task Force are evaluating the best uses for the site, including the use as the Greyhound Terminal. If site G1 is not selected for the Greyhound Bus Station, the site would temporarily continue to be used as a surface parking lot. Future site plans could include mixed-use retail/commercial and a residential development.

**Pedestrian Bridge**

A pedestrian bridge would be constructed over the railroad tracks between Stevens Avenue and the Pennington Triangle. The structure would connect pedestrian travel from the Intermodal Center facilities to 4th Avenue retail shops and the Warehouse District. This element of the project is unchanged from the 2000 EA and original Master Plan.Coordination with AMTRAK regarding the design and access issues relative to the pedestrian bridge are ongoing (see Chapter IV – Agency Scoping). AMTRAK currently refuels trains in the vicinity of the proposed bridge and would need continued refueling truck access, and a secure location (fencing).
Depot Plaza

The Depot Plaza element has changed substantially from the original plan. The Depot Plaza was envisioned as a forecourt to the historic depot buildings and would be located on the triangular area bound by Congress Street to the south, 6th Avenue to the West, and Toole Avenue to the southwest. In 2002, the City recognized an opportunity to combine the Depot Plaza with a U.S. Housing and Urban Development (HUD) HOPE VI Grant application as the Depot Plaza/Martin Luther King (MLK) Revitalization Plan. The City of Tucson Community Services Department submitted a HUD application on January 14, 2004. The Depot Plaza/MLK Revitalization Plan envisions a mixed-use, mixed-income, pedestrian friendly community south of and adjacent to the historic depot. The Revitalization Plan includes public housing and market rate tenants, homeownership opportunities, resident services, relocation services and economic development activities. The City requested $11,470,000 in HOPE VI funding for the facility. While HUD did not approve the grant request, the City retains the Depot Plaza/MLK Revitalization plan in its master planning for the Intermodal Center. Alternate funding sources including private developer, Rio Nuevo funds, and federal housing sources are being considered. No FTA funding is sought for the Depot Plaza/MLK Revitalization.

Several of the Depot Plaza changes have stemmed from the recommendation to demolish the MLK apartment building. The new MLK building would not be located in the same place as before and therefore, several of the other Depot Plaza planned elements have been moved as well.

Redevelopment in this area includes:

- Demolishing and relocating the current Martin Luther King Building, providing public and market rate housing
- Creating a parking facility for residents of the MLK building and the public
- Constructing a mixed-use building in its place, replacing part of the Ronstadt Transit Center
- Adding new outdoor public areas that could be used by people who live and work in the area as well as by patrons of the intermodal transportation.

At the present, the MLK building is located next to the south end of the Ronstadt Transit Center. Built in 1970, the MLK building serves as public housing for 97 elderly or disabled residents. It has 96 studio and one-bedroom apartments.

The MLK building is recommended for demolition because of many inadequacies. It has inadequate ventilation and mechanical systems, the roof is improperly sloped, and the layout is not conducive to public safety. Also, only the six, first floor apartments are handicap accessible. Three new buildings are planned for the depot plaza to replace the MLK building. The new MLK building would be constructed toward the north end of the plaza, just south of the MacArthur building. Two other buildings would be constructed in the general area of the current MLK building and are part of the Congress Street Redevelopment Plan. One would be located where the southernmost Ronstadt Center bus ramada is located. The other would form an L-shape along the corner of Congress and 5th Avenue.

The new MLK building would be composed of 68 one-bedroom and two-bedroom apartments. All public housing would be Americans with Disabilities Act (ADA) accessible. The two buildings associated with the Congress Street Redevelopment Plan would include 96 market-rate apartments, 23 homeownership units, and amenities. The first floor in both buildings would be reserved for commercial use. This commercial space would add to the overall appeal and the comfort for intermodal travelers who will have shopping and dining opportunities during their travels.
To accommodate parking for the residents of the depot plaza as well as for the general public, a parking garage is proposed for the space between the new MLK building and the two new mixed-use buildings. The parking garage would provide approximately 200 spaces for residents of the depot plaza. All the other parking would open to the public.

The City will continue to pursue this project element through public and private funding.

Pennington Triangle Building

The triangular shaped property defined by Pennington Street, 6th Avenue, and Toole Avenue is currently used as a surface parking lot for up to 58 automobiles. As defined by the 2000 EA, this site was planned to include a mixed-use building, with street-level retail, second level offices, and possibly support a covered overpass across Toole Avenue connecting with the Depot on the other side. The plans for the Pennington Triangle have been changed since the 2000 EA due to the Depot Plaza/MLK Revitalization Plan footprint, the Revitalization Plan would require property from the current Ronstadt Transit Center. The previously planned Pennington Triangle Building would not be constructed. Rather the property would be used to relocate Ronstadt Transit Center elements described below. Therefore, acquisition of this site remains an element of the Master Plan.

Ronstadt Transit Center

The existing Ronstadt Transit Center was to remain unchanged in the original Master Plan. The 2000 EA identified the potential to expand the facility in the future, and suggested the future improvements at the Pennington Triangle Building be designed to accommodate transit center expansion at the street level to replace bays lost by the planned Congress Street Mixed-Use development. The inclusion of the Depot Plaza/MLK Building Revitalization into the revised Master Plan requires shifting existing Ronstadt Transit Center facilities north into the Pennington Triangle. The current plan would shift 3 bus ramadas north and construct retail shops on the frontage facing Congress Street. The transit center would continue to serve Sun Tran buses and the Tucson Inner City Express Transit (TICE.T) shuttles. Sun Tran operates 21 routes in the downtown and greater metro area. TICE.T is a free shuttle service that loops around the downtown area. It has three primary routes and one express route. The purpose of the TICE.T shuttle service is to connect important downtown areas including the Tucson Convention Center, the Museum of Art, the Tucson Children’s Museum, government judicial centers and the Depot Plaza.

Railroad Tracks

The original Master Plan included a third set of railroad tracks to accommodate future passenger rail opportunities including high-speed rail and light rail. The revised Master Plan includes a set of spur railroad tracks to be constructed between the existing tracks and the depot to facilitate embarking and disembarking. The plan includes a platform for passenger convenience including compliance with ADA. The spur and platform could be used by current AMTRAK and future light rail or high-speed rail.

Parking Facilities

The original Master Plan identified the need to provide additional parking in the intermodal center area to replace parking that would be lost from adjacent projects such as the 4th Avenue Underpass and Barraza-Aviation Parkway. One of the needed parking facilities is currently under construction at the site of the former City Hall Annex at the southwest corner of Pennington and 6th Street. This 749-space 7-story garage is being built with city and private funds. The first floor will be
retail and offices, the upper 6 floors will be for parking. The old City Hall Annex has been demolished (this action was addressed in the approved 2000 EA), ground breaking ceremonies were held in September 2004.

The revised Master Plan calls for a small surface parking lot at the south end of the depot, north of Toole Avenue. This location was formerly identified in the original Master Plan as a potential commercial building site.

5th Avenue Realignment

5th Avenue was not addressed in the original Master Plan. Subsequent traffic studies have identified opportunities to improve traffic and pedestrian circulation in the Downtown Intermodal Center area. To better serve the Depot, through-traffic would be rerouted to avoid Toole Avenue. Also, Fifth Avenue would be realigned and narrowed to slow traffic and to create a right-angle intersection with Toole Avenue. The realignment is expected to increase pedestrian safety in the area.

Trolley Maintenance Area

The Trolley is an important service feature of the Downtown Intermodal Center. The original Master Plan did not identify specific improvements or construction elements related to the Trolley. The revised Master Plan adds the potential to locate a trolley maintenance facility within the Intermodal Center area. Several alternative sites just west of 5th Avenue between Steven Street and 6th Avenue are being considered. The sites are identified as T1, T2, and T3 on Figure 4.

Trolley tracks are being constructed in a separate project to connect current routes to the Depot. Long-term plans call for service extensions from the University of Arizona to 4th Avenue, on to the Tucson Convention Center and west of I-10 to the Rio Nuevo locations.

Figures 4 and 4A provides the Updated Downtown Intermodal Center layout plan.

B. Project Purpose and Need

Purpose

The Downtown Tucson Intermodal Center Master Plan (Master Plan) provided the City of Tucson with a ‘footprint’ to move toward accomplishing the goals identified by the City Center Vision & Strategic Plan (adopted November 1994) including:

- The improvement of the pedestrian environment;
- The addition of vehicular parking; and
- The creation of an intermodal transportation center.

These specific actions were envisioned to assist the downtown in re-establishing itself as the “heart” of the city. Through a community planning process, the Master Plan identifies and integrates new facilities to support existing and proposed transportation services into an historic urban district. The Master Plan, approved by the City of Tucson Mayor and Council on June 28, 1999, specifically addresses four issues that are important to the Downtown Tucson area:
1. The creation of multi-modal transit facilities;

2. Historic rehabilitation and restoration of the Union Pacific Depot;

3. Economic revitalization of both eastern Downtown Tucson and Downtown Tucson as a whole; and

4. The creation of new mixed-use parking facilities for the eastern downtown area.

Subsequent Master Plan revisions have been approved by the Mayor and city council through several actions. In April 2001, the Mayor, city council, and governing board adopted the Rio Nuevo Master Plan, a comprehensive downtown redevelopment effort with a Tax Increment Financing source. The Downtown Tucson Intermodal Center is a key element of the Rio Nuevo Plan. The Depot Plaza/MLK Revitalization Plan was approved as a concept in December 2002 and the HUD funding application was approved by the Mayor and city council on January 5, 2004. The Trolley maintenance facility component has not received Mayor and council approval, pending alternative analysis of candidate sites.

The Downtown Intermodal Center Master Plan is consistent with the City of Tucson General Plan (December 2001) goals for circulation and transportation services. Specifically Policy 3:

“Provide for a safe, efficient, and accessible public transportation system that is in harmony with area-wide environmental objectives while making the most effective and prudent use of public funds to operate the system”.

Several supporting policies define public transit centers and connectivity. Additional policies address public transit, pedestrian, bike, and trolley elements.

The Pima Association of Governments (PAG) provides regional transportation planning for the area. PAG has developed a number of transportation plans including: Travel Reduction Program, Intermodal Management System Plan, Regional Pedestrian Plan, Regional Plan for Bicycling, and Tucson Metropolitan Short Range Transit Plan. The Downtown Intermodal Center is a key feature in the PAG planning (Tucson Metropolitan Community Information Data Summary, 2003 PAG). The Draft PAG 2005-2009 Transportation Improvement Program (TIP) includes the Downtown Intermodal Center (TIP ID # 61.02) funding at $5,309,000 in FY2005. The item is entitled Union Pacific Intermodal Center Phase 3 in the TIP.

Need

In part, the need for public transportation and adequate bicycle and pedestrian routes are determined based on the population characteristics of the area. The current population in the downtown Tucson area is approximately 15,000 (Census tracts 1, 2, 3, 4, 8, 9, and 10, Census 2000). The Downtown community generally has a high proportion of young adults (30%) between the ages of 21–34 primarily due to its proximity to the University of Arizona. In addition, downtown Tucson has a disproportionate share of low to moderate-income households compared to other areas of Tucson. One census tract falls below the Health and Human Services Poverty Guidelines 2004. The average income in that tract is $16,250 versus the guideline of $18,850 for a family of four. The population base suggests a broad demographic range, including lower to moderate income level persons who are dependant upon and more apt to use public transit due to financial constraints and lower than average vehicle ownership. Also, students will not only take public transit, but will also utilize other forms of transportation, such as walking and bicycling.
Because of Tucson's close proximity to the Mexican International border and the impacts resulting from the North American Free Trade Agreement (NAFTA), Tucson experiences a tremendous influx of tourism and commercial shoppers from Mexico to the U.S. Commercial bus service runs between Tucson and Nogales, Mexico.

The following transportation modes are included in the Master Plan recommendations:

- Passenger rail-Amtrak (current service)
- High-Speed Rail (future)
- Vintage electric trolley line-Trolley (current service)
- Light Rail (future)
- City bus service-Sun Tran (current service)
- Inter-city bus service-Greyhound and Golden State Crucero Line out of Mexico (current service)
- Para-Trans for disabled access (current service)
- Private tour buses (current service)
- Phoenix Sky Harbor-Airport shuttle services-Arizona Shuttle (current service)
- Private passenger cars (current use)
- Service and emergency vehicles (current service)
- Pedestrian and bicycle (current use)

The downtown area is a hub for these services due to the employment and government services facilities located in the downtown central business district. The downtown area employs approximately 27,000, with most city, county, state, and federal offices serving Tucson being located downtown.

The Downtown Tucson Intermodal Center project site is within the boundaries of the Tucson Arts District, Tucson Empowerment Zone, and the Downtown Heritage Incentive Zone. The Tucson Arts District applied to the United States Department of the Interior's National Park Service to place the fifty acres, including the Depot buildings, on the National Register of Historic Places. The Warehouse District was placed on the National Register on October 15, 1999. The district, more commonly known as the Tucson Warehouse District was built around the railroad activity in the early part of the 1900s. A number of structures in the district are already listed on the National Register. The Union Pacific Railroad Depot is the centerpiece of the Historic Warehouse District. The community strongly identifies with these buildings and is enthusiastic for their adaptive reuse. Seven hundred to 1000 citizens and dignitaries attended the Depot Dedication ceremony on March 20, 2004.

The Empowerment Zone is a collaborative effort between the City of Tucson, Pima County and the City of South Tucson; working together to address the issues of Downtown and the inner-city. Tax incentives are provided to businesses that reside in the ZONE and/or employed persons living in the ZONE. The tax incentives benefit businesses by lowering taxes. They help employees by making them more desirable hires for businesses.

The Department of Housing and Urban Development (HUD) provided an estimated $17 billion in tax incentives nationally to stimulate job growth, promote economic development and create affordable
housing opportunities in eight new cities across the country. The City of Tucson has been selected as one of the cities to receive this award.

The project area is centrally located within walking distance to a number of downtown features.
- El Presidio Historic Neighborhood which includes museums, specialty-retail, restaurants, and residential
- Government Center with federal, state, Pima County and City of Tucson services
- Tucson Convention Center and planned Rio Nuevo cultural venues
- Barrio Historico Historic Neighborhood which is a residential and commercial neighborhood
- Armory Park Historic Neighborhood, a residential neighborhood
- Fourth Avenue retail shops, West University and Iron Horse Historic Districts
- The University of Arizona
- Historic Warehouse District
- Rialto Theater
- Hotel Congress

The demand for transit services in the project area is high due to the proximity of the services, employment, and population residing nearby.

AMTRAK currently runs 6 passenger trains per week and is currently using the depot. All the tracks at the depot are owned by Union Pacific-Southern Pacific Railroad (UPSP). UPSP runs 50-65 freight trains per day. While there are no current plans to add commuter or light rail service in Tucson, the downtown depot is the logical point for such future services. Light rail, which does not currently exist in Tucson, has been an intermodal goal of the City for several years. Having a place for light rail at the depot would make it more feasible for a light rail proposal to work within the City.

Arizona Shuttle is a service that provides passenger vans from Tucson and other Arizona cities to Sky Harbor Airport in Phoenix. The shuttle currently has three pick-up locations in the Tucson area: 5350 E. Speedway Boulevard, Park and 6th Street, and Ina Road and I-10. The company desires to operate out of the Intermodal Center and Depot. The Trolley is planning on expanding it’s service route to include Congress Street, Toole Avenue and Pennington Street downtown. The trolley would use the depot as a turn around location. The Trolley currently runs in an L-shaped pattern along 4th Avenue and University Boulevard.

Sun Tran operates the city bus service with a main hub at the Ronstadt Transit Center. Currently, 21 routes and 1200 busses per day use RTC. Service is 7 days per week. The Tucson Inner City Express Transit (TICET) operates Monday through Friday and includes stops every 20 minutes at RTC. This is a free shuttle serving the major downtown employment, government offices and businesses.

Parking in the Historic Depot District is a very important issue. Currently, there is surface parking for residents of the MLK Building in the middle of what is to become the depot plaza. Hotel Congress has surface parking along Toole Avenue. There is also metered surface parking on the southeast end of the depot. The parking lot located northwest of the depot is unpaved and requires a permit. It is currently used by employees of the MacArthur building. The Pennington Triangle as mentioned earlier, is a pay-per-day parking lot for the general public. Other parking in the area is metered parking along the street including southeast-bound Toole.
Parking improvements for the area would include the 749-space garage at the former City Hall Annex, small surface lot at the east end of the Depot, and parking at the Depot Plaza/MLK Building. This parking combined with the previously noted downtown parking study is expected to reasonably serve the Intermodal Center.

Currently, many of the streets in the project area are one way. A traffic study is underway by the City to determine the impact of converting the one-way streets into two-way streets in the downtown area. In the project vicinity, Mayor and council have approved a two-way conversion of Stone Avenue south of Congress and 6th Avenue south of Broadway Boulevard. Temporary conversion of Broadway Boulevard for the construction of the 4th Avenue underpass was also approved in June 2004.

When implemented, the proposed Downtown Tucson Intermodal Center would serve to provide efficient and seamless intermodal transportation connections for a variety of transportation uses. This project would improve on the mobility and accessibility of transit users, pedestrians, and bicyclists within the Downtown Tucson vicinity. In addition, the Intermodal Center project would assist in the historic rehabilitation and economic revitalization of the Rio Nuevo project area.


CHAPTER II: ALTERNATIVES CONSIDERED

The Master Planning process for the Downtown Tucson Intermodal Center project has been assisted by the Downtown Depot project Task Force. The task force is composed of members from the 4th Avenue Merchants Association, local merchants, Tucson Downtown Alliance, Tucson-Pima Arts Council, Tucson Arts District, West University Neighborhood Association, Iron Horse Neighborhood Association and various city staff members from Urban Planning and Design, Economic Development, Community Services and Transportation departments. The Task Force met regularly during the original Master Plan and Environmental Assessment and was reconvened in March 2004 to review Master Plan revisions presented in this updated Environmental Assessment (EA).

A series of conceptual alternative development programs were developed and critiqued by the Task Force. The Master Plan process relied upon a combination of technical data analysis and public input centering on the special interests of the projects' Task Force. With the assistance of the Task Force, City staff, and the Master Plan consultant team, a list of evaluation criteria was developed and used as a guide to evaluate the conceptual alternative development programs. The evaluation criteria in Table 1 were utilized to guide the considerations for selecting an appropriate alternative development program for the Downtown Depot project.

Preliminary alternatives were considered and presented to the Task Force. A range of conceptual alternatives was considered in the master planning process. The alternatives include:

A. Do Nothing

As a means of evaluating the need for the Intermodal Center Master Plan the ‘Do Nothing’ alternative was considered as a baseline measuring point. The do nothing alternative remains the baseline even though a portion of the original project, the Historic Depot Renovation/Restoration has been completed. The completion of that previously approved action does not preclude considering the do nothing alternative for the remainder of the project elements.

The overall project remains an important aspect in the redevelopment efforts of downtown and the do nothing alternative was not acceptable to the Task Force members.

B. Depot Gateway Vision Plan

The Depot Gateway Vision Plan document was provided to each Task Force member for review and consideration. The Plan is a document prepared by private citizens with an interest in railroads and backgrounds in community design and landscape architecture. The document recommended improvements for the Depot property and adjacent property in the Warehouse District (Depot Gateway Vision, Arthur Keating, 1995).

The Task Force's concerns were in the economic viability of the proposed land uses and function of vehicular circulation routes of the Depot Gateway Vision Plan. Direction from the Task Force was to expand upon the concepts of the Depot Gateway Vision Plan to provide for the identified needs.
No additional analysis of this alternative is necessary within the EA Update. The Depot Gateway Vision Plan did not fully meet the project needs in 2000 and does not today fulfill the project goals.

C.  City Hall Focus

This alternative considered citing a new City Hall in the Depot District. This alternative included relocating the existing office square footage and expanding the development program to meet the City's current and future needs. The program was estimated (under a separate study) to require three buildings, two of which would be eight stories tall. The Task Force considered the building heights to be too tall. They were concerned that the City Hall buildings would overwhelm the historic buildings of the district. Also, the Task Force believed that devoting building area to government functions would reduce the area available for intermodal transit-oriented development. No additional analysis of this alternative is needed. The government center concept still does not meet project goals or have Task Force support.

D.  Mixed-Use Development (Downtown Tucson Intermodal Center Master Plan)

A number of variations of this alternative were considered by the Task Force including those with an entertainment focus and with an employment focus. Each included elements to support intermodal transit. The recommendation from the Task Force was to develop a Master Plan that provided for the optimum use of intermodal transit use with supporting retail and entertainment development opportunities.

Upon a complete assessment of existing technical data, including but not limited to the broader economic redevelopment aspects for the downtown Tucson community and input from the majority of the project Task Force membership, the Mixed-use Development scenario was determined to be the most appropriate conceptual development program. From this point, with the assistance of the project Task Force, the Master Plan process refined several Mixed-use Development program scenarios, resulting in the Preferred Alternative outlined in this EA Update. This update addresses the continuing refinement of the Mixed-Use Development Alternative. The revised Master Plan concept was described in Chapter I, Section A, Project Description and Location.

Alternative sites for the Greyhound Terminal relocation were evaluated by the city and task force members. Three (3) sites have been considered: G1, G2, and G3 on Figure 4. Sites G2 and G3 have been dropped from further consideration. Sites G2 and G3 received virtually no support from Task Force members including the surrounding Iron Horse Neighborhood and 4th Avenue Merchants Association. Additionally, the potential sites have environmental conditions present due to known groundwater and soil contamination. Due to the lack of land use compatibility, neighborhood objections, and potential long-term liability and remediation costs, sites G2 and G3 have been dropped from consideration.

The potential for other permanent sites for Greyhound outside of the Intermodal Center project area was briefly examined by the city. Public discussion of the appropriateness and viability of relocating Greyhound was presented at a July 13, 2004 public meeting. The clear consensus, as reflected in the meeting summary found in Appendix B, was that the Greyhound Station should remain a component of the Downtown Intermodal Center. As noted earlier, temporary relocation of Greyhound to accommodate the 4th Avenue underpass project is needed. A public meeting on July 22, 2004 presented potential locations. No FTA funding is associated with the temporary relocation.
The Trolley Maintenance and Storage yard sites T1 (current site), T2, and T3 have been evaluated. Sites T2 and T3 are associated with properties with known soil and groundwater contamination and will require further investigation and analysis of cost or liability issues.

Table 1, Criteria For Evaluation of Site Alternatives, provides an overview of the issues and considerations held by the Downtown Intermodal Center project Task Force in developing and analyzing a range of alternatives during the planning process.

<table>
<thead>
<tr>
<th>Table 1 – Criteria For Evaluation Of Site Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>➢ Does the concept provide linkages for the development of multi-modal options (Auto, bus, taxi, historic trolley, light rail, train, and bicycle)?</td>
</tr>
<tr>
<td>➢ Does it provide transitional spaces for the users of the multi-modal options?</td>
</tr>
<tr>
<td>➢ Does it serve the multiple users (Downtown community, residents of greater Tucson, tourists)?</td>
</tr>
<tr>
<td>➢ Can the requirements of the American’s with Disabilities Act be reasonably met?</td>
</tr>
<tr>
<td>➢ Does it contribute to the movement of key traffic routes in Downtown?</td>
</tr>
<tr>
<td>Parking</td>
</tr>
<tr>
<td>➢ Is Parking located to support shared uses, i.e. office worker parking in the day and entertainment venues in the evenings and weekends?</td>
</tr>
<tr>
<td>➢ Is long-term parking available?</td>
</tr>
<tr>
<td>➢ Does it replace the parking removed through the development of the study area and associated projects, i.e. Barraza-Aviation Parkway?</td>
</tr>
<tr>
<td>➢ Is a parking structure facility required for the concept?</td>
</tr>
<tr>
<td>➢ Can the construction of a parking facility be subsidized and affordable to the users?</td>
</tr>
<tr>
<td>➢ Is access to the parking area reasonable?</td>
</tr>
<tr>
<td>Culture, History and Tradition</td>
</tr>
<tr>
<td>➢ Are the opportunities for historic restoration/reuse maximized?</td>
</tr>
<tr>
<td>➢ Are there multiple opportunities for public art (outdoor performance space, integration of public art, etc.)?</td>
</tr>
<tr>
<td>➢ Are there opportunities for artists (live/work space, galleries, studios)?</td>
</tr>
<tr>
<td>➢ Are Downtown’s other cultural venues linked to the area via public transit?</td>
</tr>
<tr>
<td>➢ Does the concept express the historic value of this area?</td>
</tr>
<tr>
<td>➢ Is there an opportunity for a transportation museum? Additional interpretive opportunities? Relocation of Locomotive 1673?</td>
</tr>
<tr>
<td>Safety</td>
</tr>
<tr>
<td>➢ Do the uses encourage sufficient activity to provide a sense of public safety of the area throughout the day/night?</td>
</tr>
<tr>
<td>➢ Does pedestrian circulation not conflict with vehicular traffic?</td>
</tr>
<tr>
<td>➢ Are there opportunities for the youth to be positively engaged?</td>
</tr>
<tr>
<td>Economics</td>
</tr>
<tr>
<td>➢ Does it provide services for the downtown community, residents of greater Tucson, and tourists?</td>
</tr>
<tr>
<td>➢ Does it meet the market trends?</td>
</tr>
<tr>
<td>➢ Does it encourage a diverse composition of ongoing revenue generating uses? Will it be a self-sustaining area or require public funding?</td>
</tr>
<tr>
<td>➢ Does it provide opportunities for the development of needed businesses?</td>
</tr>
<tr>
<td>➢ Does it create opportunities to induce revitalization in adjacent areas?</td>
</tr>
<tr>
<td>➢ Does the concept avoid displacing existing economic activities?</td>
</tr>
<tr>
<td>➢ Can it be finances privately?</td>
</tr>
<tr>
<td>➢ Does it generate a fiscal benefit for the City?</td>
</tr>
<tr>
<td>Implementation</td>
</tr>
<tr>
<td>➢ Does it meet the criteria for multiple funding sources (City/County, State, Federal, private developers, nonprofit organizations)?</td>
</tr>
<tr>
<td>➢ Are there opportunities for Private/Public partnering?</td>
</tr>
<tr>
<td>➢ Does it meet realistic strategies for development (Phasing and integration with adjacent projects?)</td>
</tr>
<tr>
<td>➢ Will it encourage further public involvement through the build-out of the plan?</td>
</tr>
<tr>
<td>➢ Does it meet current City policies?</td>
</tr>
</tbody>
</table>
E. Preferred Alternative

The preferred alternative is shown in Figures 4, 4A and includes the following project elements:

- Restoration of the Main Depot buildings
- Removal of two non-historic railroad buildings, McGuire's Jewelry and City Hall Annex Buildings
- Relocation of the Historic Locomotive 1673
- Relocation of the Greyhound Bus Station
- Addition of a pedestrian bridge across the railroad tracks
- Creation of a Depot Plaza (combined with Depot Plaza/MLK Building)
- Addition of a third set of railroad tracks at the depot
- Demolition and reconstruction of the Martin Luther King (MLK) Building
- Modification to the Ronstadt Transit Center, extending into Pennington Triangle
- Construction of a single parking garage at 6th Avenue and Pennington Street to serve the Depot area; Construct a surface parking lot east of the Depot off Toole Avenue
- Realign 5th Avenue at Toole Avenue
- Develop a Trolley Maintenance Facility
- Add a railroad spur line and passenger platform at the Depot

The bolded items are new elements from the original 2000 EA, italicized items are elements previously approved by the 2000 EA and recently constructed.
The City has used or proposes to utilize FTA funding for the following project elements.

**FTA Grant AZ-03-0038**
Total - $2,462,120 (FTA $1,969,696, City $493,424)
Repairs to Depot and out buildings (complete)
City Annex demolition (complete)
Depot construction (complete)
Archaeology and Engineering (complete)

**FTA Grant AZ-03-0040**
Total - $3,713,681 (FTA $2,970,945, City $ 742,736)
Depot and out-buildings construction (complete)
McGuire Building demolition (complete)

**FTA Grant AZ-03-0042**
Total $3,465,101 (FTA $2,772,081, City $693,020)
Depot construction (complete)
Tenant improvements (underway)
Architectural and Engineering fees (underway)
Acquisition of Pennington Triangle (pending)
Environmental Assessment (underway)
6th Avenue Design Modifications (pending)

**FTA Grant AZ-03-0044**
Total - $4,918,394 (FTA $3,934,715, City $983,679)
Passenger Platform (future)
Spur and Siding (future)
Greyhound Bus Station relocation (pending)
Greyhound Bus Station design/construction (pending)
Ronstadt Transit Center modifications/design (future)
City Hall Annex demolition (complete)
Pedestrian crossings on Toole Avenue (pending)
Depot Plaza acquisition (complete)
Parking facility (pending)
FTA Grant AZ-03-0047 (grant pending)

Total - $2,946,000

Pedestrian bridge over railroad, design and construction (future)
Trolley maintenance facility (future)
Fencing, site security and safety improvements (future)
Roadway circulation modifications (future)

Total funding is approximately $17,500,000. This does not include improvements associated with the proposed Depot Plaza/MLK Building Revitalization Plan. Separate HUD funding was sought for this plan, but not secured to date. Alternate funding mechanisms including Tax Increment Financing (TIF), private funding and Rio Nuevo funding will be developed by the City. No FTA funds would be sought or used for the MLK Revitalization Plan.
CHAPTER III:  
SOCIAL, ECONOMIC, AND ENVIRONMENTAL IMPACTS

A. Land Use, Acquisition and Potential Relocation

Land uses in the project area are a mix of commercial, transit services, residential (MLK apartment), government offices, parking lots, and railroad corridor (see Figure 5). Signature properties include the Historic Depot, Hotel Congress, MacArthur Building, Ronstadt Transit Center, Greyhound Bus Station, Martin Luther King (MLK) Apartment Building, and the Union Pacific Southern Pacific Railroad. These land uses have been present for many years, with the Depot dating back to 1907.

Surrounding area land uses are similar with a mix of office buildings, both private and government sector, commercial (retail shops, restaurants, banks, services), parking structures, and hotels. Land uses are consistent with a major city’s Central Business District; a high employment center with the services needed to support the business and government institutions.

The proposed project would result in two land use changes in the project area. Parking lots north of the Depot (G1 on Figure 4) and at the Pennington Triangle (RI on Figure 4) would be removed. The Pennington Triangle parking lot would be replaced with the modified Ronstadt Transit Center and the lot north of the Depot would become the new Greyhound Bus Station. The existing Greyhound Bus Station would also be removed. However, the need to relocate Greyhound is not driven by the Intermodal Center, but is a result of the 4th Avenue Underpass construction. The Underpass to be located just east of the current underpass is an approved project to be built by the City in 2004. The current underpass is obsolete, and cannot meet future traffic demands. The 4th Avenue underpass is a separate project from the Intermodal Center funded by Regional Surface Transportation Program (STP) funds. The new alignment of the underpass requires the Greyhound Bus Station to be demolished. The City acquired the property in early 2004.

The Pennington Triangle site would require complete acquisition, this parcel is privately owned and totals approximately 0.4 acres. The property is currently used for surface parking only. The additional parking areas created within the Master Plan improvements will replace the displaced parking spaces.

The potential trolley maintenance sites along 5th Avenue are currently vacant or leased parcels. The parcels are privately owned. Site T1 is owned by the Old Pueblo Trolley Inc. and used to store parts and equipment. T2 and T3 are vacant lots. Site T2 is currently used for temporary storage of automobiles and is listed for sale or lease. Site T3 is a vacant lot in front of a closed business at 411 N. 5th Avenue.
Figure 5 – Land Use Inventory
The Depot Plaza/MLK Building planned element is not currently funded; however, the proposed redevelopment would substantially alter the site. Currently, the site is comprised of the multi-story MLK building fronting on Congress Street, a combined parking lot used by MLK, Hotel Congress, and the MacArthur Building. The portion of the lot serving the MacArthur Building includes a small covered parking section and storage building. When constructed in the future, the Depot Plaza/MLK Building will maintain the existing land use (residential apartment), and add a public plaza component and a retail component to the site. The current parking would be replaced nearby. At the time of the 2000 EA, the site included the McGuire’s Jewelry Building, which was owned by the City. Since then, the building has been demolished and the space is currently used for parking.

Business displacements would be minimal due to the implementation of the developments of the Downtown Intermodal Center Master Plan. Some land acquisition will be necessary for the modified Ronstadt Transit Center and the Trolley Maintenance yard. The Trolley sites are being offered for sale or lease and are therefore available. No active business occurs on sites T2 or T3. No employees are located at these sites, and no physical improvements other than chain link fencing are found on site. Site T2 would require the removal of currently about 25-30 automobiles, some would require towing. The Pennington Triangle parking lot is an active parking lot business. There are no full-time employees at this parking lot. A part-time lot attendant or the owners periodically service the fee collections and provide general lot clean-up.

The City of Tucson Department of Urban Planning and Design has reviewed the Intermodal Center Master Plan with respect to currently adopted area and neighborhood policies (see letter in Chapter IV, A). The project area overlaps three area plans: Plan for Downtown Tucson, El Centro Redevelopment Plan and University Area Plan. In general the Master Plan is consistent with the area plans with the exception of the potential alternative Greyhound Station sites G2 and G3. As noted earlier in Chapter II, Alternatives Considered, sites G2 and G3 are not recommended. Previously in the 2000 EA, the City of Tucson Planning Department supported the Master Plan and felt the plan was consistent with adopted plans and policies (see letters in Chapter IV, Section A).

Land acquisition and displacement impacts for these sites are compatible with surrounding land use and conforms to area zoning requirements of the city. Under the previous Urban Mass Transportation Administration (UMTA) Circular 5620.1 and the 2000 EA, the acquisition impacts were rated Possibly Significant due to property acquisition and a business displacement (Pennington Triangle parking lot). The land use and zoning impacts were rated Generally Not Significant as the proposed project was compatible with surrounding land uses and conforms to zoning.

**Mitigation**

No residential relocations or business relocations are required by this project. Compensation for the Pennington Triangle Parking Lot acquisition and either Trolley maintenance site T2 or T3 is the only mitigation required (pending further soil and groundwater contamination investigations). A replacement surface parking lot site is not readily available in the downtown area to compensate the Pennington Triangle property owner. Therefore, financial compensation is required. There are no currently operating businesses located at the T2 and T3 sites. No changes to city zoning code or existing land use plans other than those actions previously noted by the city council are required.
B. Minority Considerations and Environmental Justice

Title VI of the Civil Rights Act of 1964 and related statutes assure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, or disability. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population*, signed by President Clinton on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

Census tract data, compiled by the Arizona Department of Economic Security, was referenced to assess the demographic composition of the project area (see Table 2). Three census tracts are located within the project area.

The 2000 census information indicates that one census tract in the project area has a minority population exceeding 50 percent. The Pima County average is 38.5 percent minority. There are no census tracts that contain less than 50 percent minority but more than the county average.

The 2004 Arizona Department of Economic Security report lists the Department of Health and Human Services poverty guideline as a median household income at or below $18,850 for a family of four. The 2000 census reported 1999 income information. One census tract within the study area has an average household income below the Department of Health and Human Services’ poverty guideline.

The project area includes minority and low-income groups. These groups should not however, experience disproportionately high or adverse effects to their health or environment due to the project. The proposed Downtown Tucson Intermodal Center Master Plan is a project designed to revitalize the transportation center of the city. Although initial construction will have negative impacts such as slowed traffic, extra noise, etc., there should be no long-term negative impacts. This conclusion is based on the fact that there will be no permanent loss in units of public housing, and no social services or facilities will be eliminated as a direct result of this project. Indirectly, the Martin Luther King building (residential apartments south of the depot plaza) may be demolished and replaced. This work would require temporary relocation of residents. Residents would be given the option to voluntarily relocate to other public housing or to obtain a voucher to temporarily relocate and return upon completion of the reconstruction. At present no funding is in place for the demolition and reconstruction of the MLK Building. The city application for HUD funding was not approved, however public and private funding continues to be sought for the MLK Revitalization.

The overall Intermodal Center project is expected to create new jobs and provide a stimulus for economic revitalization in the downtown area. Multi-modal transportation in the area will be improved for motorists, buses, and trains. These improvements should benefit all area residents.
Table 2 – Study Area Demographic Data

<table>
<thead>
<tr>
<th>Location/ Cens Tract</th>
<th>Boundaries</th>
<th>Total Pop.</th>
<th>Total Households</th>
<th>Average Persons/Household</th>
<th>Median Household Income/Family of Four</th>
<th>Under 18</th>
<th>18-24</th>
<th>25-44</th>
<th>45-64</th>
<th>65 and Over</th>
<th>Minority Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pima County</td>
<td></td>
<td>843,746</td>
<td>332,350</td>
<td>2.47</td>
<td>$35,758</td>
<td>24.6</td>
<td>10.9</td>
<td>28.4</td>
<td>21.9</td>
<td>14.2</td>
<td>38.5</td>
</tr>
<tr>
<td>100</td>
<td>E Toole Avenue to North W Cushing Street to South E Toole Avenue to East Granada Avenue to West</td>
<td>605</td>
<td>410</td>
<td>1.23</td>
<td>$9,464</td>
<td>4.5</td>
<td>10.1</td>
<td>32.1</td>
<td>25.0</td>
<td>28.4</td>
<td>35.5</td>
</tr>
<tr>
<td>400</td>
<td>E Mahel Street to North E 10th Street to South N 1st Street to East N Ash Avenue to West</td>
<td>3,229</td>
<td>1,759</td>
<td>1.75</td>
<td>$20,802</td>
<td>11.9</td>
<td>29.3</td>
<td>39.4</td>
<td>14.1</td>
<td>5.3</td>
<td>29.7</td>
</tr>
<tr>
<td>800</td>
<td>E Hughes Street to North E 24th Street to South S Campbell Avenue to East S Railroad Avenue and S 4th Avenue to West</td>
<td>1,502</td>
<td>655</td>
<td>2.28</td>
<td>$24,800</td>
<td>22.2</td>
<td>14.8</td>
<td>33.4</td>
<td>20.0</td>
<td>9.5</td>
<td>66.1</td>
</tr>
</tbody>
</table>

Note: Shaded boxes represent income or minority percentages exceeding eligibility criteria.

Minorsity population Guideline > 50%, (EPA)
Low Income - Median Household Income for a family: 4 <$18,850.

(Arizona Department of Economic Security report for Health and Human Services' poverty guidelines as of 2004)

C. Social Considerations (Parks, Schools, Emergency Services, Transportation Services, Neighborhoods)

Transportation Services - Traffic

The City of Tucson, prepared an updated Traffic Impact Analysis for the Intermodal Center Master Plan, documenting the effects on traffic and parking (Downtown Tucson Intermodal Center Traffic Impact Analysis, Entrancio, February 2004). As part of this feasibility examination, analysis of the traffic impacts associated with the creation of the intermodal center was conducted. The purpose of the traffic study was to examine the existing and future transportation system serving the proposed center and to assess the impacts the project would have on traffic operations on the roadways and intersections surrounding this site.

The traffic study area limits are Toole Avenue on the north side, 6th Avenue on the west, Congress Street on the south, and 4th Avenue on the east. There are a total of seven intersections within this study area. Currently, the roads running through the study area are one-way only, with the exception of Toole Avenue, but have plans to be converted to a two-way system. This two-way system was analyzed in Downtown Traffic Study for Conversion of One-Way Streets to Two-Way Operations, Transcore, December 2003.

The analysis includes the complete renovation of the Depot, located on the north side of Toole Avenue between 4th Avenue and 6th Avenue. The renovation is intended to allow the Depot to service AMTRAK, the Greyhound bus lines, Trolley, Tucson-Phoenix Shuttle, a possible Tucson-Phoenix commuter rail, and possibly intra-city light rail. The analysis also included retail space and a parking structure serving the depot, conversion of the Pennington Triangle site, which includes the modified Ronstadt Transit Center, renovation of the City Annex building (includes a parking...
structure and mixed-use retail), and the development of the Depot Plaza/MLK Building Revitalization (Hope VI), which includes mixed-use residential and retail.

Trips were generated from these sources and placed on the street network system for the 2010 AM and PM Peak Hour models. The 2025 models were not analyzed as they have been modeled to be at saturated (gridlock) conditions. It was assumed that during these conditions, any trips created by the intermodal center project would be offset by through traffic leaving the system to a less congested route outside the study limits. The analysis shows that the intermodal center reduces the level of service (LOS) at 3 intersections by one LOS category, 2 intersections show improved LOS, one intersection remains the same with or without the project, and one intersection is eliminated. Table 3 compares existing and future LOS with and without the Intermodal Center project.

**Table 3 – Existing and Future Levels of Service, PM Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Type</th>
<th>PM Peak (4:30 to 5:30)</th>
<th>With/Without Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Avenue/Toole Avenue/Congress Street</td>
<td>Stop Controlled</td>
<td>C</td>
<td>A/A</td>
</tr>
<tr>
<td>5th Avenue/Toole Avenue</td>
<td>Stop Controlled</td>
<td>C</td>
<td>B/A</td>
</tr>
<tr>
<td>5th Avenue/Congress Street</td>
<td>Signalized</td>
<td>B</td>
<td>B/B</td>
</tr>
<tr>
<td>6th Avenue/Congress Street</td>
<td>Signalized</td>
<td>B</td>
<td>C/B</td>
</tr>
<tr>
<td>6th Avenue/Pennington Street</td>
<td>Signalized</td>
<td>B</td>
<td>D/C</td>
</tr>
<tr>
<td>6th Avenue/Toole Avenue/Alameda Street</td>
<td>Signalized</td>
<td>D</td>
<td>E/E</td>
</tr>
<tr>
<td>Toole Avenue/Pennington Street</td>
<td>Signalized</td>
<td>B</td>
<td>NA**/A</td>
</tr>
</tbody>
</table>

*Note: Toole Avenue/Pennington Street does not exist with the Intermodal Center as the modified Ronstadt Transit Center closes Pennington Street.

The analysis indicated that the intermodal center has a minor impact to the surrounding roadway system. This conclusion is generally consistent with the July 1999 Traffic Impact Analysis prepared for the 2000 Environmental Assessment. The 1999 study concluded, "Adequate excess capacity exists to allow new project trips to be accommodated without degradation of levels of service." A comparison of the peak hour LOS studies in 1999 and 2004 is found in Table 4.

**Table 4 – 2010 Levels of Service w/ Project, PM Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Type</th>
<th>PM Peak (4:30 to 5:30)</th>
<th>LOS (2004 Study)</th>
<th>LOS (1999 Study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toole Avenue/Congress Street</td>
<td>Signalized</td>
<td>A</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>5th Avenue/Toole Avenue</td>
<td>Stop Controlled</td>
<td>B</td>
<td>B</td>
<td>N/A</td>
</tr>
<tr>
<td>5th Avenue/Congress Street</td>
<td>Signalized</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>6th Avenue/Congress Street</td>
<td>Signalized</td>
<td>C</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>6th Avenue/Pennington Street</td>
<td>Signalized</td>
<td>D</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>6th Avenue/Toole Avenue/Alameda Street</td>
<td>Signalized</td>
<td>E</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

The 1999 traffic study did not show AM Peak LOS as the PM Peak was determined to be the critical operations time. Two intersections, 6th/Pennington and 6th/Toole/Alameda, showed substantial change between the two studies.
Transportation Services - Parking

The 2004 traffic study concluded approximately 714 long-term and short-term parking spaces would be needed to serve the Intermodal Center. Parking requirements for the site are based on mode split data for each use as well as data contained in Parking Generation, 2nd Edition, Institute of Transportation Engineers, 1987. The total long-term (greater than one hour) and short-term (one hour and less) parking requirements were evaluated. The Updated Intermodal Center Master Plan includes parking for approximately 1000 vehicles. The programmed multi-story City Annex Parking Garage at 6th Avenue and Pennington will provide 749 spaces, a surface lot at the east end of the Depot could accommodate about 33 vehicles, MLK Building parking would provide about 200 spaces. This total of about 1000 spaces would meet the Intermodal Center needs and provide some capacity for patrons of other downtown sites as well. This conclusion is generally consistent with the 2000 EA that indicated about 800 spaces would be needed and the Intermodal Center plan would provide 683 spaces. The major difference is in 2000, the City Annex Garage was assumed to provide only 300 spaces versus the current plans for a 749-space garage.

Transportation Services – Pedestrian/Bike

Increased pedestrian and bike activity would be expected, primarily related to transit trips. The 2004 traffic study estimated about 2,500 daily transit trips would occur in the project area by 2010. A large number of pedestrians are expected to cross Toole Avenue between the Depot and Ronstadt Transit Center. There is a signalized intersection at Pennington and Toole Avenue to assist pedestrians. The traffic study recommended an elevated or underground crossing between the Depot and Ronstadt Transit Center as adding a signalized crossing would impact traffic flow.

In general, the Intermodal Center Master Plan creates a more pedestrian friendly area with the landscaped plaza, redesigned 5th Avenue connection to Toole Avenue that would slow traffic down, enhanced pedestrian sidewalk areas, a pedestrian bridge over the railroad tracks, streetscapes, crosswalk improvements, and increased pedestrian level lighting. No on street bike lanes are currently provided in the project area. Bike routes will be designated, however, there is not sufficient space to add bike lanes to downtown streets. When the new 4th Avenue underpass is completed (separate project), the current 4th Avenue underpass will become a pedestrian and bike facility only. This will assist bike and pedestrian movement between the 4th Avenue retail area and Toole Avenue. The overall pedestrian and bicycle facilities will be improved with the implementation of the Intermodal Center Master Plan.

AMTRAK identified issues (meeting with Dave Jones, AMTRAK) with the pedestrian bridge over the railroad, with respect to their ability to continue to refuel trains in the vicinity of the proposed bridge. Specifically, AMTRAK would need an easement to allow continued refueling truck access to the tracks and would need a fenced, secure area. The refueling operation, which occurs three times a week, transfers large quantities of diesel fuel and therefore needs to be secure from pedestrians or unauthorized access. The city will coordinate bridge design and access with AMTRAK. AMTRAK did express support for the pedestrian bridge citing instances of pedestrians crossing the railroad tracks at unprotected locations.

The 2000 EA concluded that based on the criteria in UMTA C 5620.1, impacts on traffic, bike/pedestrians, and parking were Generally Not Significant, as LOS was not degraded and parking losses were mitigated through replacement parking sites. The 2004 traffic analysis concludes a minor degradation in LOS between conditions with the project and without the project (Table 3). Table 4 showed the LOS relationship between the 1999 study and 2004 study. The PM peak condition at the 5-legged intersection of 6th Avenue/Toole Avenue/Alameda Street does result in LOS E both with and without the project, therefore the traffic conditions at that location are not
driven entirely by the Intermodal Center project. No on-site mitigation measures specific to the Intermodal Center are required, losses in parking are replaced on site and degradation of traffic service to LOS E at one intersection is not a result of the project. The degradation of LOS at 2 intersections is somewhat offset by LOS improvement at 2 intersections. The *Downtown One-Way Streets to Two-Way Operations (2003, Transcore)*, provides plans for Traffic Study for Conversion of One-comprehensive traffic circulation improvements.

**Community Disruption (Parks, Neighborhoods, Schools)**

The Iron Horse and West University Neighborhoods extends into or are adjacent to the project area. No blocks of homes or residential communities exist in the project area other than the MLK Apartment building. The nearest homes are located just east of the study area, east of 4th Avenue and south of 9th Street. This area near the Coronado Hotel has several single family and multi-family homes surrounded by commercial properties. There are no parks in the project area. El Presidio Plaza is located about ¼ mile west of the project area at Pennington west of Church Avenue. The nearest public schools are the Safford Elementary and Middle School at 4th Avenue/14th Street about ¼ mile south of the project area and Tucson Magnet High School at 6th Street east of 3rd Avenue, also about ¼ mile from the project area. Several Charter and Private Schools are located in the downtown area, the nearest schools are City High School at 48 E. Pennington Street and Pima Vocational High School at 97 E. Congress Street. Both schools are within 2-3 blocks of the project area. None of the schools would expected to be impacted, other than a positive impact in providing better transit services and safer pedestrian/bike opportunities for students.

The well known 4th Avenue Merchants Shopping Area is adjacent to the project area along 4th Avenue between 9th Street and University Boulevard. The University of Arizona campus is approximately ½ mile east of the project area.

The nearest emergency services (police and fire) are located about ½ mile south of the project area at Stone Avenue and 14th Street. University Medical Center is the nearest hospital, located about 2 miles northeast at Campbell Avenue and Drachman Street.

Implementation of the Intermodal Center Master Plan would not split or alter neighborhood or community boundaries. The project would likely improve the link between Downtown and the neighboring 4th Avenue commercial district. Service areas of emergency facilities would not be interrupted nor would access to these facilities be reduced. Correspondence from the City of Tucson Planning Department (2000 EA) states that any short term disruption caused by the construction of the project will be offset by the long term benefits on the community and the surrounding businesses and neighborhoods. Concerns were expressed in the 2004 letter (see appendix) from the City of Tucson Department of Urban Planning and Design regarding potential citing of the Greyhound Station at alternative G2 or G3. As noted earlier those two sites have been dropped from further consideration. No negative impacts to the neighborhood or business communities other than temporary business access are expected. Future construction activities should have little or no impact on the 4th Avenue shops. The Hotel Congress, and businesses on the south side of Congress between 4th Avenue and 6th Avenue would experience some temporary inconveniences or access restrictions during the Depot Plaza/MLK Building Revitalization. Congress Street is the subject of a separate Master Plan to redevelop the street in a more pedestrian, bike and business friendly manner.

The Intermodal Center will be designed to ensure the safety of patrons and staff, and it will meet all applicable standards for lighting, visibility, and accessibility. Pedestrian movements will be separated from bus and rail movements, and security lighting for pedestrian pathways and
platforms will be attractive and effective in increasing visibility at night. The overall pedestrian and bicycle environment will be enhanced, increasing the overall safety for pedestrians and bicyclists. The majority of through traffic will be routed away from Toole Avenue onto either 6th Avenue or the future Barraza-Aviation Parkway.

The original Master Plan called for a police kiosk in the Depot Plaza area, increasing both perceived and actual security levels. Subsequent plans indicate a neighborhood police station is more likely to be located within a new MLK Building or an area mixed-use building.

In the 2000 EA, based on the criteria in UMTA C 5620.1, project impacts were determined Generally Not Significant. That conclusion remains consistent with the Updated Downtown Intermodal Center Master Plan. Community disruption impacts from the proposed project are not expected. Mitigation in the form of adequate construction notices to area businesses, traffic control plans and signage will lessen impacts to businesses. The city will coordinate construction activities with the affected parties through their Community Relations, Transportation, Rio Nuevo and other City Departments. No parks, schools or emergency services would be affected.

D. Economics

The creation of the Intermodal Center has the potential of being a catalyst for the continued revitalization of Downtown Tucson. A number of projects related to the general downtown Tucson revitalization are either underway or in various planning stages. The Rio Nuevo Master Plan provides a mix of cultural/historical heritage, urban arts and entertainment development in the downtown area. A key component of the Rio Nuevo is a transit link with the University of Arizona. The City of Tucson is starting a Major Investment Study consistent with the FTA New Start Program to determine potential federal funding for a linkage between the University and downtown Tucson. The city also has underway a Congress Street Master Plan and Streetscape Design immediately adjacent to the Downtown Intermodal Center project. The opportunity for secondary development in the Intermodal Center area exists and the City is actively encouraging that development. Improvements in visual quality, safety, and increased pedestrian and other activity will make the area more attractive to redevelopment. Secondary development would draw people to the area and enhance the use of mass transit, reinforcing the need for an Intermodal Center located in downtown Tucson.

One of the goals of the Master Plan is for this development to become a catalyst for the revitalization of the commercial and retail businesses in this area of the downtown. The Master Plan project will also link the University/4th Avenue area to the Downtown while increasing the pedestrian activity of both areas. The potential development changes are consistent with local planning and are part of approved land use plans.

The 2000 EA determined impacts on secondary development would be Generally Not Significant based on the UMTA C 5620.1 guidance. The proposed project may generate a demand for secondary development, but according to correspondence from the City of Tucson’s Planning Department (2000) and Department of Urban Planning and Design (2004) such development will be desirable and is in conformance with the area’s adopted plans and codes. No negative impacts are expected to the areas’ economic health. The expectation is that increased use of the downtown area will result in growth of new commercial retail, arts, and restaurant businesses.
E. Hazardous Materials

The general project area has been subject to several hazardous material investigations over the years due to the presence of the railroad and related businesses. A summary of the investigations and known contamination was presented in the 2000 EA. The City of Tucson Environmental Services Department researched and updated the status of the known contamination sites, subsequent mitigation, pending actions, and provided recommendations for further action needed (see letter in Appendix A, Memorandum, June 9, 2004, Richard Boyd).

The following information is organized by Intermodal Center project element as there are multiple and overlapping hazardous material sites in the general project area.

Ronstadt Transit Center: The present location of the Ronstadt Transit Center is east of 6th Avenue between Pennington and Congress. When the existing facility was constructed, several out of service underground storage tanks (USTs) associated with the former hardware store were reportedly discovered and removed. Further construction at the transit center would be required by the updated project. Anytime excavation takes place near former UST locations, petroleum impacted soil could be encountered.

Depot Plaza/MLK Building Revitalization: A Phase I Environmental Site Assessment – City of Tucson Depot Plaza Project Area (Engineering and Environmental Consultants, October 15, 2003), and Pre-Demolition Asbestos Survey – Martin Luther King Apartment Building (AMEC Earth and Environmental, October 20, 2003) were conducted for the City of Tucson. The Phase I identified several locations within the plaza area that may have historically been the locations of automotive service facilities and USTs. The on-site structure, the MLK Building, has friable and non-friable asbestos containing material that would require abatement prior to demolition. Further investigation would be required to identify/confirm the presence or absence of former USTs and if any contamination resulted from UST leakage. The demolition of the MLK Building would require mitigation to address the asbestos containing materials removal.

Former City Hall Annex Parking Facility: The former City Hall Annex building underwent a pre-demolition Asbestos survey in January 2002. AMEC Earth & Environmental, Inc. conducted this assessment for the City of Tucson. The building has had all of the asbestos concerns abated, and the entire structure and basement have been demolished. This site has no remaining significant environmental concerns.

Pennington Triangle: This parcel is located due north of the present day Ronstadt Transit Center. A geophysical survey was conducted on this site for the City of Tucson by Zonge Engineering & Research Organization in April 1997. A geophysical anomaly was identified, which could indicate the presence of an out of service buried UST system. Further investigation would be required to determine the presence or absence of any UST and if any soil contamination is present.

Pedestrian Bridge: The pedestrian bridge spans over the railroad tracks and associated right-of-way at the northern end of the present day Union Pacific Railroad Depot property. There were locomotive fueling spur/stations at the north and south end of the depot property. These out of service fueling spurs and associated rail lines were the locations of underground fuel storage tanks and dispensing lines. These lines and tanks were known to have leaked and impacted the surrounding soil and perched aquifer. Union Pacific Railroad and their consultant, Environmental Resources Management (ERM) Southwest, are currently assessing and remediating these historic releases. The work being performed by Union Pacific Railroad at the depot area falls under the jurisdiction of the Arizona Department of Environmental Quality (ADEQ) UST Program.
Relocated Greyhound Terminal: The Updated Downtown Intermodal Center Master Plan considered three possible locations—G1, G2, and G3—as a site for the relocation of the Greyhound Bus Terminal. Two sites (G2 and G3) have been dropped from further consideration due to potential environmental hazards and lack of neighborhood support. Site G1 remains the preferred ultimate site for the terminal. All three considered relocation sites have potential contamination issues.

- **G1** is located on former railroad property in close proximity to a former fueling spur. A voluntary remediation agreement between Union Pacific Railroad and ADEQ is in place.

- **G2** is located in the center of the Arizona Department of Environmental Quality’s (ADEQ) “7th Street and Arizona Avenue” Water Quality Assurance Revolving Fund (WQARF) boundary. This is a State Superfund area with known groundwater and soil contamination. Acquiring property within this area could have long-term environmental liabilities and associated remediation costs.

- **G3** is also located in the center of ADEQ’s “7th Street and Arizona Avenue” WQARF boundary. It is also the location of a leaking UST site. This is a State LUST and Superfund area with known groundwater and soil contamination. Acquiring property within this area could have long-term environmental liabilities and associated remediation costs.

**Trolley Maintenance Area**: Three possible locations—T1, T2, and T3—were considered as sites for the relocation of the Trolley Maintenance facility. T1 is the current maintenance facility located on 8th Street between 4th and 5th avenues. Alternative sites T2 and T3 will be considered during the alternatives analysis due to the potential soil and groundwater contamination known to be present at those sites.

- **T1** is the location of historic vehicle maintenance. Areas of soil on site may have been impacted by historic operations. Any excavation in this area could encounter petroleum-impacted soil.

- **T2** is located in the center of the ADEQ’s “7th Street and Arizona Avenue” WQARF boundary. This is a State Superfund area with known groundwater and soil contamination. Acquiring property within this area could have long-term environmental liabilities and associated remediation costs.

- **T3** is also located in the center of ADEQ’s “7th Street and Arizona Avenue” WQARF boundary. It is also the location of a leaking UST site. This is a State LUST and Superfund area with known groundwater and soil contamination. Acquiring property within this area could have long-term environmental liabilities and associated remediation costs.

Union Pacific Railroad, their predecessor Southern Pacific Railroad, and ERM have collected over a decade of documents describing the assessment and definition of the groundwater impacts in the vicinity of the historic railroad depot. The perched aquifer (approximately 65 to 75 feet below land surface) defined in these reports, along with the associated petroleum and chemical impacts underlay most of the features of the Intermodal Center. The contaminants found in the perched aquifer came from several sources including diesel from the railroad, gasoline from multiple former gasoline service stations, and chlorinated solvents associated with multiple former dry cleaning operations. Any deep excavation on these sites could encounter impacted soil from the historic movement of the compounds in the perched water-bearing zone.

Funding should be set aside to properly characterize and dispose of impacted soil when or if it is encountered during construction for any project element in the Intermodal Center. Prior to the City’s acquisition of, or change of use of City owned sites, the City’s Environmental Services Department...
should be contacted to ensure compliance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requirements. See figure 6 for a map of the identified anomaly and monitoring well locations.

The 2000 EA qualified the potential hazardous material impacts as both Generally Not Significant and Generally Significant due to the variety of potential impacts and mitigation. Further investigation and potential mitigation costs could be required with the construction of any improvements in the vicinity of the railroad operations. As Intermodal Center projects move forward, the City's Environmental Services Department would conduct the necessary investigations/due diligence prior to property acquisition or construction activities. The City does have in place a 1998 “Purchase and Sale Agreement” with Union Pacific Railroad Company for the Depot and related out buildings addressing site contamination responsibilities. Similar agreements would likely be prepared for any property acquisition such as the Pennington Triangle property.

F. Air Quality

The National Ambient Air Quality Standards (NAAQS) were established by the federal Clean Air Act of 1970, as amended in 1977 and 1990. The primary air pollutants of concern for which the NAAQS have been established are ozone, sulfur dioxide, carbon monoxide (CO), nitrogen dioxide, lead, and particulate matter equal to or smaller than 10 microns in diameter (PM₁₀). The NAAQS for these and other criteria pollutants are presented in the Table 5, National Ambient Air Quality Standards.

The Pima County Department of Environmental Quality (PDEQ) maintains an air-quality monitoring network extending over eastern Pima County and including both urban and rural locations. There have been no violations of the NAAQS for ozone, sulfur dioxide, CO, nitrogen dioxide, or lead in the Tucson area for over 10 years. A violation of the PM₁₀ standard occurred in 1999. The PDEQ submitted documentation that showed the exceedences of the NAAQS to be the result of natural events. A Natural Events Action Plan (NEAP) was submitted to the Arizona Department of Environmental Quality (ADEQ) and Environmental Protection Agency (EPA) in June 2001 and approved December 3, 2003. According to the 2001 Air Quality Report (Pima County Department of Environmental Quality, August 2002), air pollution levels for pollutants in the Tucson area are generally well below the federal NAAQS standards.
Table 5 – National Ambient Air Quality Standards

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide</td>
<td>1-hour</td>
<td>35 ppm</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>8-hour</td>
<td>9 ppm</td>
<td>**</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>Annual</td>
<td>100 µg/m³</td>
<td>100 µg/m³</td>
</tr>
<tr>
<td>Ozone</td>
<td>1-hour</td>
<td>0.12 ppm</td>
<td>0.12 ppm</td>
</tr>
<tr>
<td></td>
<td>8-hour</td>
<td>0.08 ppm</td>
<td>0.08 ppm</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>24-hour</td>
<td>150 µg/m³</td>
<td>150 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>50 µg/m³</td>
<td>50 µg/m³</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>24-hour</td>
<td>65 µg/m³</td>
<td>65 µg/m³</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>15 µg/m³</td>
<td>15 µg/m³</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>3-hour</td>
<td>**</td>
<td>1300 µg/m³</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>365 µg/m³</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>80 µg/m³</td>
<td>**</td>
</tr>
<tr>
<td>Lead</td>
<td>Calendar Quarter</td>
<td>1.5 µg/m³</td>
<td>1.5 µg/m³</td>
</tr>
</tbody>
</table>

Source: Pima County Department of Environmental Quality
Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter; ** = No standard

A non-attainment area is an area in which compliance with the NAAQS has not been established for one or more pollutants. The proposed project is located in an area currently designated as attainment for PM₁₀ and ozone. In the past, the Tucson area was previously designated as a CO non-attainment area. On April 25, 2000 the EPA approved ADEQ’s request to reclassify the Tucson region as being in attainment and a maintenance plan to insure on going compliance. At the time of the 2000 EA, the EPA was in the process of responding to the reclassification request and maintenance plan.

Motor vehicles represent the largest source of CO in the Tucson area. Carbon monoxide levels have declined considerably since Pima County began monitoring this pollutant in 1973, despite increased vehicular traffic. The improvement has occurred primarily due to several factors:

- The federal tailpipe emission standards for new cars;
- The state vehicular Inspection and Maintenance Program for non-attainment areas;
- Various local traffic control measures; and
- Locally adopted Clean Air Program and Travel Reduction Program.

There have been no violations or exceedances of the ozone NAAQS since 1982. Over the last several years, average measured ozone concentrations have remained relatively uniform throughout the Tucson metropolitan area.

Upon completion, the proposed project is not anticipated to impair the air quality in the surrounding area. The project will combine existing multimodal uses into a new facility. Urban mass transportation projects have the potential to affect air quality by changing the number of transit vehicles and/or automobiles at specific locations. A detailed traffic analysis was conducted to evaluate the magnitude of expected effects on traffic (see Appendix C-Traffic Impact Analysis). The analysis indicated that traffic volumes would not substantially increase as a result of the project.
Traffic in the vicinity of the proposed project typically operates at LOS B to LOS D in the current and LOS A to LOS E in future year conditions. The intersection with LOS E is not a result of the project. Analysis showed that intersection would become LOS E with or without the project.

The project is located in an EPA-designated attainment area for CO, ozone and particulate matter. The proposed projects are consistent with air quality planning and are in the State Implementation Plan. At the time of the 2000 EA, the impacts were rated as possibly significant due to the non-attainment status for CO at the time. As noted above, the Tucson region was re-designated in attainment in 2000. Also, the implementation of the Intermodal Transportation Center has the potential to reduce the community’s overall automobile miles (and corresponding pollution).

G. Noise Analysis

Noise from roads, trains, and the Greyhound and Ronstadt bus stations radiating to residential and commercial buildings in the project area were evaluated in this analysis.

Traffic Noise Criteria

The Federal Transit Administration (FTA) uses the Federal Highway Administration (FHWA) criteria to assess road noise.

The FHWA design guideline is used to determine when noise mitigation measures (such as noise walls) are appropriate to reduce the noise radiating from a highway to residences. The FHWA Procedures for Abatement of Highway Traffic Noise and Construction Noise (Title 23, Code of Federal Regulations, 772.5 (g)) states that a traffic noise impact occurs when the predicted traffic noise levels approach or exceed the sound levels shown in Table 6 or when the predicted traffic noise levels substantially exceed the existing noise levels.

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>Hourly L_{eq} Noise Levels (dBA)</th>
<th>Description of Activity Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>57 (exterior)</td>
<td>lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose</td>
</tr>
<tr>
<td>B</td>
<td>67 (exterior)</td>
<td>picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals</td>
</tr>
<tr>
<td>C</td>
<td>72 (exterior)</td>
<td>developed lands, properties, or activities not included in Categories A or B above</td>
</tr>
<tr>
<td>D</td>
<td>--</td>
<td>undeveloped lands</td>
</tr>
<tr>
<td>E</td>
<td>52 (interior)</td>
<td>residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums</td>
</tr>
</tbody>
</table>

ADOT’s Noise Abatement Policy for Federal Aid Projects (March 21, 2000) defines “approach” as three decibels below the FHWA design guidelines and “substantially exceeding the existing noise levels” as an increase of 15 dBA or more above the existing noise levels.
Therefore, in assessing the mitigation requirements in the vicinity of the Intermodal Center project expansion, an hourly $L_{eq}$ maximum of 64 dBA was used at residential and hotel buildings and 69 dBA at commercial properties, as well as a 15 dBA increase in the hourly $L_{eq}$, to determine if a noise "impact" occurs that requires mitigation to be considered.

FHWA and ADOT guidelines indicate that abatement should be considered if either of the criteria described above are exceeded; however, the abatement measures must be reasonable, feasible, and desired by the affected individuals. Feasibility deals primarily with engineering considerations (e.g., can a barrier be built given the topography of the location; can a substantial noise reduction be achieved given certain access, drainage, safety, or maintenance requirements; are other noise sources present in the area, etc.). According to ADOT, reasonableness criteria shall include, but not be limited to: amount of noise reduction provided, cost of abatement, views of impacted residents, barrier height limitations, and aesthetic value.

**Traffic Noise Prediction Method**

The noise levels that radiate from the roadways were predicted using the computer model developed for the FHWA called Stamina 2.0. Input parameters used by this model include vehicle type and number, roadway configuration, barrier locations, receiver locations, building shielding and ground type. The model uses the national energy mean emission level for automobiles, medium trucks, heavy trucks, motorcycles, and buses.

Three conditions were predicted: existing peak hour traffic noise, future (year 2025) peak hour traffic noise with the project and future (year 2025) PM peak hour traffic noise without the project (no build condition).

Based on the traffic report (*Downtown Tucson Intermodal Center Traffic Impact Analysis*) prepared by Entranco and dated February, 2004, the year 2025 traffic will exceed the capacity of the roadways and through trips will need to be diverted to maintain equilibrium between traffic volume and traffic capacity. To predict the year 2025 peak hour traffic noise level, the peak traffic volumes for the year 2010 were used and any additional traffic is assumed to be diverted around the project. The traffic data used are shown in Appendix C.

The vehicle mix used in this analysis for all roadway segments was based on information provided by Entranco traffic engineers and included cars (90%), medium trucks (6%), and heavy trucks (4%). To make the analysis more conservative and ensure analysis of worst-case predictions, no intervening terrain features or building shielding were applied to the model.

Traffic speed of 25 mph was used in the noise model on all roads, which is higher than Entranco traffic engineers calculate for the peak hour traffic speeds.

To account for building reflections, 1 dBA was added to all prediction results.

**Traffic Noise Verification**

Sound pressure levels were measured using one Larson Davis Model 820 sound level meter which meets the American National Standard Institute (ANSI) requirements for Type 1 sound level meters. The detector of the meter was set for "fast" response. The microphone was located approximately five feet above the ground. The meter has a built-in microprocessor and memory capability that allow calculations and storage of a variety of statistical data. The sound level meter was field calibrated prior to the noise measurement.
Noise measurements were made for two hours during peak traffic conditions (6:30 to 7:30 AM) on Tuesday, June 15, 2004.

The sound level recording location was located next to the existing MLK Building at the intersection of 5th Avenue and Congress Street. The location was 30 feet west of the 5th Avenue curb and 12 feet north of Congress Street (see attached field data collection sheets).

To insure the predicted sound levels were as accurate as possible, the noise measurement made at the residence was used to calibrate the computer model. The results are shown in Table 7.

**Table 7 – Measured and Predicted Noise Levels during Peak Traffic Hour at the MLK Building on the NW Corner of Congress and 4th Avenue**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Measured Leq (dBA)</th>
<th>Predicted Existing Leq (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30 – 7:30 AM</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>7:30 – 8:30 AM</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 7, the predicted existing noise level is equal to the loudest measured noise level; hence, our noise model is predicting accurately.

**Prediction Locations for Detailed Analysis**

Noise levels generated by the Intermodal project were predicted at 7 receivers, representing various areas throughout the project (see Figure 7, Noise Prediction Locations).

- **Location 1**, existing MLK building – Location 1 is on the northwest corner of Congress Street and 4th Avenue.
- **Location 2**, existing Hotel Congress – Location 2 is in front (south side) of Hotel Congress on Congress Street.
- **Location 3**, 6th Avenue south – Location 3 is on the west side of 6th Avenue between Congress Street and Pennington Street.
- **Location 4**, future MLK building location – Location 4 is on the southwest side of Toole Avenue approximately 75 feet northwest of the corner with 4th Avenue.
Figure 7 – Noise Prediction Locations
- **Location 5**, Coronado Hotel – Location 5 is on the southeast corner of 4th Avenue and 8th Street. This location was chosen to represent the loudest location of the residences located east of this site.

- **Location 6**, 6th Avenue mid – Location 6 is on the west side of 6th Avenue between Pennington Street and Alameda Street.

- **Location 7**, 6th Avenue north – Location 7 is on the east side of 6th Avenue approximately 100 feet south of the corner with 6th Street.

**Traffic Noise Prediction Results**

Table 8 shows the predicted existing, future no build, and future build noise levels from traffic noise.

<table>
<thead>
<tr>
<th>Receiver Location</th>
<th>Predicted Existing Leq (dBA)</th>
<th>Predicted Future No Build Leq (dBA)</th>
<th>Predicted Future Build Leq (dBA)</th>
<th>Difference between Predicted Future Build and Future No Build (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>64</td>
<td>65</td>
<td>65</td>
<td>0</td>
</tr>
</tbody>
</table>

*Bold* Exceeds the ADOT guideline

1 – future residence or hotel

2 – future commercial

**Discussion of Predicted Traffic Noise Levels and Comparison with FHWA Noise Guidelines**

Based on the analysis, the future traffic generated noise levels will be very similar existing (within 2 dBA) and there will be less than 1 dBA difference between the future build and no build noise levels. The predictions show that the peak hour traffic noise levels on the ground floor of the one residential building (MLK) and commercial properties along Congress Street located within the Intermodal Center project area are experiencing and will continue to experience noise levels at or above the ADOT noise limit.

**Traffic Noise Mitigation Options**

The following noise mitigation options were considered and determined to be not feasible.
1. Traffic management measures such as reducing speed limits, detouring trucks, or signing to prohibit certain types of vehicles are not feasible for this project. Traffic speeds are constrained by the volume expected. Buses cannot be limited because the central public bus station is located within the project area.

2. Altering horizontal or vertical alignments are not practical because the project is in downtown Tucson.

3. For sound walls to be effective, they must be continuous. Because of the need for access to sidewalks, commercial establishments, and parking, sound walls are not practical in downtown Tucson. In addition, sound walls would require space that is not readily available and would not protect receivers above the first floor.

**Transit Noise Criteria**

The FTA uses the graph below to determine noise impacts from Transit Projects to residential properties (and buildings where people normally sleep). The DNL noise descriptor is used to assess residential buildings and where people normally sleep. For commercial properties, 5 dBA is added to the Predicted Noise Exposure, as shown in Figure 8 below, and an hourly $L_{eq}$ descriptor is used in the assessment.

*Figure 8 – Noise Impact Criteria for Transit Projects*

**Noise Prediction Method**

The FTA’s "Transit Noise and Vibration Impact Assessment" was used to predict future noise generated by trains, the Greyhound and Ronstadt transit centers. The noise from buses away from the transit centers was included in the road noise analysis.
Amtrak Railway

According to the Entranco traffic report, there are 6 train trips per week with no more than one Amtrak stop on any day. The number is expected to increase to 8 trips per week by the year 2025, with no more than 2 trips on any day. The trains are assumed to be traveling at 35 mph in the project area. We have assumed two locomotives for each train. According to the FTA formulas, the hourly Leq is 65 dBA at 50 feet.

Greyhound Transit Center

One possible location for the Greyhound Bus Station is on the northeast corner of 6th Avenue and Toole Avenue. According to the Entranco traffic report, there are approximately 44 arrivals each day (no more than 6 during any one hour) and that number will only slightly increase to 46 by the year 2010 (and not increase any more in subsequent years). Based on the FTA formulas, the hourly Leq is approximately 51 dBA at 50 feet.

Ronstadt Transit Center

There are approximately 1200 bus trips through the Ronstadt Transit Center per day and 84 buses during the peak hour. The noise contribution based on the FTA formulas, the hourly Leq is approximately 77 dBA at 50 feet. The future operation of the Ronstadt transit center is not expected to change considerably.

Noise Prediction Results

Table 9 shows the contribution from all other transit noise sources. The total levels are between 44 and 59 dBA and are expected to increase by no more than 1 dBA. According to the FTA noise criteria, there is no significant impact. The noise from the transit noise sources is predicted to be more than 6 dBA below the noise from traffic at all locations. Hence, traffic noise will dominate.

<table>
<thead>
<tr>
<th>Receiver Location</th>
<th>Predicted Railway Noise Level (dBA)</th>
<th>Predicted Greyhound Noise Level (dBA)</th>
<th>Predicted Ronstadt Noise Level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing</td>
<td>Future</td>
<td>Existing</td>
<td>Future</td>
</tr>
<tr>
<td>1</td>
<td>42</td>
<td>47</td>
<td>37</td>
<td>37</td>
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</tr>
<tr>
<td>7</td>
<td>48</td>
<td>48</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>

1 – future residence or hotel (DNL)
2 – future commercial (hourly Leq)


**Construction Noise**

Construction noise differs from traffic noise in several ways:

- Construction noise lasts only for the duration of the construction contract, with most construction activities in noise-sensitive areas being conducted during hours that are least disturbing to adjacent and nearby residents.

- Construction activities generally are of a short-term nature, and depending on the nature of construction operations, could last from seconds (e.g., a truck passing a receptor) to months (e.g., constructing a bridge); and

- Construction noise also is intermittent and depends on the type of operation, location, and function of the equipment, and the equipment usage cycle. Traffic noise, on the other hand, is present in a more continuous fashion after construction activities are completed.

Land uses in the project area would be exposed to noise from construction activity under the Build Alternative.

The Pima County Code (Chapter 9.30.070) states that construction will be allowed to start between 5 AM and 7 AM (depending on the time of year, type of construction and zoning of land) and stop by 7 PM. Permits may be granted for construction at different times.

Table 10 shows the noise levels produced by various types of construction equipment. The types of construction equipment used for this project will typically generate noise levels of 80 to 90 dBA at a distance of 15 meters (50 feet) while the equipment is operating. Construction equipment operations can vary from intermittent to fairly continuous, with multiple pieces of equipment operating concurrently.

**Table 10 – Typical Construction Equipment Noise Levels**

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>Noise Level in dBA at 50 Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulldozer</td>
<td>80</td>
</tr>
<tr>
<td>Front Loader</td>
<td>72 - 84</td>
</tr>
<tr>
<td>Jack Hammer or Rock Drill</td>
<td>81 - 98</td>
</tr>
<tr>
<td>Crane with Headache Ball</td>
<td>75 - 87</td>
</tr>
<tr>
<td>Backhoe</td>
<td>72 - 93</td>
</tr>
<tr>
<td>Scraper and Grader</td>
<td>80 - 93</td>
</tr>
<tr>
<td>Electrical Generator</td>
<td>71 - 82</td>
</tr>
<tr>
<td>Concrete Pump</td>
<td>81 - 83</td>
</tr>
<tr>
<td>Concrete Vibrator</td>
<td>76</td>
</tr>
<tr>
<td>Concrete and Dump Trucks</td>
<td>83 - 90</td>
</tr>
<tr>
<td>Air Compressor</td>
<td>74 - 87</td>
</tr>
<tr>
<td>Pile Drivers (Peaks)</td>
<td>95 - 106</td>
</tr>
<tr>
<td>Pneumatic Tools</td>
<td>81 - 98</td>
</tr>
<tr>
<td>Roller (Compactor)</td>
<td>73 - 75</td>
</tr>
<tr>
<td>Saws</td>
<td>73 - 82</td>
</tr>
</tbody>
</table>

Source: U.S. EPA Noise from Construction Equipment and Operations
Locations within about 500 meters (1,650 feet) of a construction site are expected to experience occasional episodes of noise levels greater than 60 dBA. Areas within about 150 meters (500 feet) of a construction site will experience episodes with noise levels greater than 70 dBA. Such episodes of high noise levels will not be continuous throughout the day and will generally be restricted to daytime hours.

**Construction Noise Mitigation**

The following noise mitigation measures could be implemented to reduce noise impacts from construction noise:

1. Construct noise barriers, such as temporary walls or piles of excavated material, between noisy activities and noise sensitive receivers.
2. Reroute truck traffic away from residential streets, if possible. Select streets with the fewest homes and as much as possible away from the MLK building, if no alternatives are available.
3. Locate equipment on the construction lot as far away from noise sensitive receivers as possible.
4. Construct walled enclosures around especially noisy activities, or clusters of noisy equipment. For example, shields can be used around pavement breakers, loaded vinyl curtains can be draped under elevated structures.
5. Combine noisy operations to occur in the same time period. The total noise will not increase significantly and the duration of the noise impact will be less.
6. When possible, avoid nighttime activities. Sensitivity to noise increases during the nighttime hours at residential receivers.
7. Use specially quieted equipment when possible, such as quieted and enclosed air compressors, residential or critical grade mufflers on all engines.

**Comparison between Current EA and 2000 EA Noise Results**

Along Congress Street, the current traffic noise predictions are approximately 10 dBA higher than the 2000 EA noise predictions. Along 4th Avenue they are within 1 dBA. The difference in the predictions along Congress Street are due to different predicted traffic volumes.

For other transit noise sources (bus stations and Amtrak), both noise studies found no significant noise impact from the project and the noise levels were found to be well below the traffic noise levels.

**H. Visual Quality**

The Updated Intermodal Center Master Plan presents a unique aesthetic opportunity for the study area. The existing structures in the area include a unique mix of “historic” architecture, industrial warehouse-style buildings, and newer office structures. New construction proposed in the Master Plan for the Intermodal Center will be located on parcels of land that are currently used for parking lots (the Pennington Triangle, former McGuire’s Jewelry, and the G1 site). The Master Plan calls for the new structures to be “Compatible with the scale and architectural style of the Historic District
Environmental Assessment
Downtown Tucson Intermodal Center Master Plan Update, 2004

without violating the requirements of the Department of Interior to not mimic historic buildings, and acknowledging the time in which new development occurs.”

The Master Plan called for a historic renovation of the existing depot structure, which was completed in March 2004. This renovation included the opening of the arcade on Toole Avenue other aesthetic improvements to the building. A “Depot Plaza” with increased landscaping with native vegetation would also be included in the project. The relocation of the Ronstadt Transit Center to the north would continue in the current style that compliments the area architecture.

The City of Tucson Planning Department in 1999 reviewed the Master Plan and concluded the “Implementation of the Intermodal Center will enhance the area aesthetically.” The conceptual design style for the project elements has not changed since the 2000 EA. Aesthetic impacts of the project are not expected to have a negative impact on the view shed. To the contrary, an integrated design with landscaping features, pedestrian oriented areas and consistent architectural design will enhance the area. The demolition and reconstruction of the 6-story MLK building would have the greatest visual impact on the area. Currently this building lacks architectural style, is in a state of disrepair and generally not deemed a visual attraction. The conceptual building elevations provided in the HUD application show a contemporary 8-story building with a varied roofline and heights, earth tone colors, and a streetscape.

The 2000 EA concluded visual impacts would be Generally Not Significant under the criteria in Table O of UMTA C5620.1. Members of the Depot Plaza Task Force include citizens from the Tucson Arts District Partnership and Tucson Pima Arts Council. The Intermodal Center Master plan has met with approval of the Task Force. No negative visual impacts are expected.

I. Water Resources

Water Quality

The proposed project is located in a developed commercial area, and no surface bodies of water are located on or adjacent to the site. All sites where new construction is proposed are currently paved. Therefore, there should be no additional peak discharge levels. The project is subject to Section 402 of the Clean Water Act addressing stormwater run-off from construction projects. The Arizona Department of Environmental Quality (ADEQ) administers the program in Arizona. An Arizona Pollution Discharge Elimination System (AZPDES) permit would be required prior to construction. The preparation of a Stormwater Pollution Prevention Plan (SWPPP) addressing best management practices to prevent construction waste from entering drainage ways would be prepared by the City or their contractor.

The project will be constructed to Pima County and City of Tucson ordinances and standards requiring provisions to contain spills of possible pollutants, and storm drainage separation of oil and grease. The proposed facility will not result in the disposal of hazardous, polluting or toxic substances into any body of water. The project does not require a Section 404 permit from the U.S. Army Corps of Engineers (Corps).

Waters of the U.S./Wetlands

The proposed project is located within a developed commercial area, and no natural drainages or waters of the U.S. subject to Corps jurisdiction are present. No wetlands are located within or near the site. The nearest natural drainage is the Santa Cruz River about 1 mile west of the project area.
Flooding

The project site is located outside of the 100-year flood boundary, as determined by the Federal Emergency Management Agency. As the site is currently 100 percent hard coverage (pavement or buildings) and the proposed site plan will actually increase the amount of unpaved open space and landscaping, construction of the proposed project could slightly reduce peak runoff from the site.

Navigable Waterways and Coastal Zones

No navigable waterways or coastal zones are located within or near the project site.

No water quality impacts are expected by this project in a fully urban setting. The 2000 EA similarly concluded no impacts on water resources were expected and therefore, Generally Not Significant according to UMTA C 5620.1.

J. Biological Resources

Ecologically Sensitive Areas

The project is fully located in a developed downtown. No natural habitat or resources are present. No native vegetation (other than a street landscape planting of desert trees) or wildlife is present. No ecologically sensitive areas are located within or near the site that would be affected by the construction and operation of the proposed Intermodal Center.

Endangered Species

The Arizona Game and Fish Department (AZGFD) has reviewed the project for its potential to adversely affect special status species, habitats of special concern, and other significant wildlife resources. The Department does not anticipate that State wildlife resources will be adversely affected by the project (see AZGFD letter in Appendix A). Coordination with AZGFD in 1999 suggested the possibility of several bat species roosting in depot buildings that would be demolished under the Intermodal Center Plan. AZGFD recommended that each building be inspected prior to demolition for bats. The renovation project has been completed and no bats were encountered during the remodeling.

No threatened or endangered species would be impacted by this project. No native vegetation is present. Therefore, no impacts to biological resources are expected. This conclusion is the same as the 2000 EA, Generally Not Significant according to UMTA C 5620.1.

K. Cultural Resources

The Intermodal Center Master Plan project is located within the historic Tucson Warehouse District. The Tucson Arts District applied to the United States Department of the Interior's National Park Service (NPS) to place a total area of 50 acres on the National Register of Historic Places (NRHP). The District was placed on the NRHP on October 15, 1999 (see SHPO letter in Appendix D). The main depot building is the centerpiece of the district. Fifty-eight contributing buildings or structures and 17 noncontributing structures are included within the Property.
At the time of the 2000 EA, application had been made to the NPS for inclusion on the NRHP. The site is significant under Criterion A in the areas of Transportation, Commerce, and Industry in association with the growth and economic development of Tucson and the surrounding region in the first half of the twentieth century. The District also meets National Register Criterion C in the area of Architecture. The district boundaries are generally Toole Avenue on the south, Ash Avenue on the west, 6th Street on the north, and 4th Avenue on the east (see Figure 9, Tucson Warehouse District).

The Updated Downtown Intermodal Center Master Plan elements north of Toole Avenue fall within the district. Those elements are the Depot itself (renovations were completed in March 2004), site G1 (potential Greyhound), site P2 (potential surface parking), and T1 (Trolley Maintenance Area). No other project elements are included within the district as sites G2 and G3 have been dropped from further consideration, as have sites T2 and T3.

The 2002–2004 renovation of the historic depot was completed under a Memorandum of Agreement (MOA) between the Federal Transit Administration Region IX, Arizona State Historic Preservation Office, and the City of Tucson. This MOA documented consultation with SHPO pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act. The MOA stipulated the following measures:

- "All alterations and additions necessary to facilitate proposed new uses for any of the contributing properties of the historic district, and associated new construction within the Area of Potential Affect (APE), meet the Secretary of the Interior's Standards for Treatment of Historic Properties, as determined in consultation with the State Historic Preservation Officer".

- "Copies of reports, plans, or other products generated under this Agreement and the implementation of the Plan will be provided to the Arizona State Historic Preservation Office for review and comment".

Correspondence from Arizona’s State Historic Preservation Office (SHPO), for the 2000 EA, states that the project will have “No Adverse Effect” on historic properties as long as any new construction and/or renovations meet the Secretary of the Interior’s Standards (see Appendix D).
Figure 9 – Tucson Warehouse District
A monitoring and discovery plan was in place for the depot renovations. The main depot building was restored to its 1941 façade and interior. Two buildings were removed that were built after 1950 and were not considered historically significant. During renovation of the depot the City of Tucson provided cultural resources monitoring due to the potential of resources in addition to the depot buildings. A report titled *Cultural Resources Monitoring at the Historic Southern Pacific Depot, Tucson, Pima County, Arizona* (May 19, 2004, Desert Archaeology Inc.) was prepared. This report notes artifacts associated with the former San Xavier Hotel that occupied a portion of the Depot site until a fire in 1903 destroyed the hotel. The report recommends the former San Xavier Hotel site may meet significance requirements for the National Register of Historic Places.

A MOA between the City and SHPO has been developed for the HUD HOPE VI Depot Plaza/MLK Revitalization Plan. This MOA, covering the area south of Toole Avenue, is currently in review by SHPO. While the HOPE VI funding was not secured, the City is continuing to pursue the MOA as alternate funding sources are sought. No FTA funds are proposed for the Depot Plaza/MLK Building. A copy of the draft MOA is included in Appendix D. Section 106 Consultation under the National Historic Preservation Act (Title 36, CFR, Part 800), is required. The City archaeologist will prepare a MOA to fully cover the project’s “Area of Potential Effect” (APE). The MOA parties will be City of Tucson, SHPO, and FTA. Based on the criteria in Table M of UMTA C 5620.1, the project’s impact on historic properties and parklands is Possibly Significant.

**L. Section 4 (f) and 6 (f)**

Section 4(f) of the Department of Transportation Act of 1966 (Title 49 USC, Section 303), states that it is national policy to make a special effort to preserve the natural beauty of the countryside, public parks and recreation lands, wildlife and waterfowl refuges and historic sites. Section 4 (f) permits the Secretary of transportation to approve a project that requires the use of any such publicly owned land provided: (1) there is no feasible and prudent alternative to use such land; and (2) all possible planning has been undertaken to minimize harm to the 4(f) lands.

The Intermodal Center does involve the Tucson Historic Warehouse District, a NRHP property. The Intermodal Center project element that directly involved the Depot building has been completed under a MOA between FTA, City, and SHPO as noted earlier. A new MOA is being developed by the City of Tucson.

Section 6(f) of the Land and Water Conservation Fund (LWCF) stipulates that “no property acquired or developed with LWCF assistance shall be converted to other than public outdoor recreation uses without the approval of the Secretary of the Interior.” No LWCF assisted properties are located in the vicinity of the project, therefore there is no Section 6(f) involvement with this project.

**M. Construction**

Construction impacts are assessed below for each of the eight areas typically affected by construction activities.

1. **Noise**—Construction noise in the form of heavy equipment is a given in any major project. A detailed analysis of noise impacts during construction is provided in Chapter III, G. Noise Analysis. The following measures to mitigate construction noise may be utilized:
Environmental Assessment  
Downtown Tucson Intermodal Center Master Plan Update, 2004

A. Construct noise barriers, such as temporary walls or piles of excavated material, between noisy activities and noise sensitive receivers.

B. Reroute truck traffic away from residential streets, if possible. Select streets with the fewest homes and as much as possible away from the MLK building, if no alternatives are available.

C. Locate equipment on the construction lot as far away from noise sensitive receivers as possible.

D. Construct walled enclosures around especially noisy activities, or clusters of noisy equipment. For example, shields can be used around pavement breakers, loaded vinyl curtains can be draped under elevated structures.

E. Combine noisy operations to occur in the same time period. The total noise will not increase significantly and the duration of the noise impact will be less.

F. When possible, avoid nighttime activities. Sensitivity to noise increases during the nighttime hours at residential receivers.

G. Use specially quieted equipment when possible, such as quieted and enclosed air compressors, residential or critical grade mufflers on all engines.

2. **Disruption of utilities**—Project design will be coordinated with the local utility providers to minimize service interruptions. No detailed design plans currently exist to identify specific utility conflicts. It should be expected that all major utilities—gas, water, power, phone, sewer and fiber optic—are present in the project area and subject to some service interruptions during construction. The proposed project is not expected to cause disruption to any utility for a commercial or industrial facility for more than 24 hours.

3. **Disposal of debris and spoil**—Construction would involve soil excavation, building demolition and pavement removal. Any waste material generated during construction would be taken to approved landfill sites.

4. **Water quality and runoff**—There are no bodies of water adjacent to, or in the vicinity of the site. Drainage and runoff will be controlled during construction as directed in a SWPPP.

5. **Access and distribution of traffic**—The project site is large enough to contain most construction traffic on site. Some disruptions along Toole Avenue may occur. Traffic would be easily detoured onto Congress, Stone, Broadway (after two-way conversion), 4th Avenue (after underpass construction) and 6th Avenue. Construction road closures will be coordinated with police, fire and other emergency access vehicles.

6. **Air quality and dust control**—Some deterioration of air quality can be expected during construction, due to the operation of construction equipment combined with the slower traffic speeds that are associated with a construction zone. This would be a localized condition that would be discontinued when the project is completed. The roadway contractor shall observe and comply with all pollution ordinances, regulations, orders, etc. from local jurisdictions. During demolition, debris removal, and construction, the contractor will be required to minimize the release of dust and other particulates into the atmosphere. For dust control, Title 17 of the Pima County Code outlines activity permits and performance standards required for construction activities.
7. **Safety and security**—The contractor will be required to follow all local safety requirements and to ensure that the construction site and materials are secure.

8. **Disruption of businesses**—Construction is expected to inconvenience and affect nearby businesses on a temporary basis. The downtown area is congested and has limited parking. Construction detours and loss of parking does typically affect nearby businesses. This temporary affect is unavoidable in a fully built urban setting. The City would communicate with local businesses regarding the expected construction periods, detours, or other restrictions well in advance of construction through the City Community Relations Department, Rio Nuevo office, and Transportation Department. Traffic control plans would be developed and coordinated with local law enforcement.

Specific mitigation measures would be developed to reduce construction impacts as project design plans are developed. In general, contractors will be required to obtain all necessary permits and comply with all relevant City, County, State, and Federal regulations governing construction and safety. The 2000 EA determined construction impacts of the project are Generally Not Significant under the criteria of UMTA C 5620.1; that conclusion is unchanged in 2004. Construction impacts will occur, but can be mitigated with standard practices noted.

## N. Secondary and Cumulative Impacts

The National Environmental Policy Act (NEPA) requires that the potential direct, secondary, and cumulative impacts of a federally-funded project be identified, evaluated and mitigated as appropriate. Within the context of NEPA, secondary effects are defined by the Council on Environmental Quality (CEQ) as impacts that are “caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable” (40 CFR 1508.8). Cumulative effects are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...” (40 CFR 1508.7). Logically, if a given project does not *directly* impact a particular environmental resource, that project would not contribute to a *cumulative* impact on that resource.

No natural resources are present in the project, therefore no impacts will occur to environmental resources either directly or in a secondary or cumulative manner. The project is expected to create the opportunity for secondary development or redevelopment in the downtown area. No properties in the downtown area feature natural resources that may be affected by reasonably foreseeable future development.

Air quality in the region is in attainment with federal standards. Automobile exhaust is a substantial component of regional air quality. Additional traffic growth will continue in the downtown area as reflected in the 2004 Traffic Impact Analysis. That analysis concluded that the Intermodal Center would not be a major contributor to growing congestion in the project area. Generally, traffic LOS beyond the year 2010 would be same with or without the Intermodal Center project. The project could be expected to be a cumulative component of future air quality. The Pima Association of Governments (PAG) is responsible for evaluating regional air quality through the annual Transportation Improvement Program (TIP). The Intermodal Center is in the approved 2005–2009 TIP and found to be in conformity. Future transportation projects would continue to be evaluated for air quality conformity by PAG.
Social and economic effects are also considered in evaluating secondary and cumulative impacts. The Intermodal Center project is expected to improve the overall downtown vitality in terms of both economic development and attracting residential ownership in the downtown area. As noted in the project purpose and need, the Intermodal Center is hoped to be a stimulus for investment and revitalization in downtown economy. Related downtown projects such as the Rio Nuevo Master Plan and Congress Street Master Plan are complementary projects that continue the goal of downtown Tucson revitalization.
CHAPTER IV – COORDINATION

A. Agency Scoping

An agency scoping process was used to gather input on alternatives, design, identify issues and help evaluate environmental issues. Letters and direct contact with agencies with jurisdiction of interest in the project or project area were contacted for input. Initial coordination occurred in 1999 with: City of Tucson – Planning Department, Transportation Department and Office of Environmental Management, Arizona Game and Fish Department, Pima Association of Governments, and State Historic Preservation Office. Comment letters from those agencies are found in Appendix A and were included in the 2000 EA.

In 2004, due to the Updated Intermodal Center Master Plan, the City again coordinated with local jurisdictions and interested parties. Letters were sent to: City of Tucson – Department of Urban Planning and Design, Office of Environmental Management and Historic Preservation Officer, Arizona Game and Fish Department, Pima Association of Governments, State Historic Preservation Office, Union Pacific Railroad, U.S. Department of Housing and Urban Development, Greyhound Lines Inc., and AMTRAK. The coordination letter is found in Appendix A, as well as the responses received.

HUD was also contacted directly. They elected not to respond in writing, but noted the agency had no comments (personal communication, Ernest Molins, HUD Regional Environmental Officer, San Francisco. June 16, 2004). No response from Union Pacific has been received. The City met with AMTRAK on June 30, 2004 to discuss their concerns. AMTRAK provided a follow-up letter as well.

Issues noted by the agency/stakeholder letters included:

- City of Tucson Office of Environmental Management (OEM) – OEM provided status update on the hazardous material investigations that have occurred over the last several years. Their information helped determine potential Greyhound relocation sites G2 and G3 were not in the best interest of the City. Similarly, Trolley Maintenance sites T2 and T3 had environmental contamination concerns.
- City of Tucson Department of Urban Planning and Design – Planning supported the general Master Plan; however, they had concerns with the G2 and G3 locations for Greyhound based on neighborhood and land use issues.
- Arizona Game and Fish Department – AZGFD had no concerns and noted no special status species or habitat present.
- Pima Association of Governments – PAG identified several issues of interest. (1) The relocation of Greyhound and the process to be followed, for that relocation is a regional issue, and the City of South Tucson requested PAG input. Subsequent to the PAG letter; the Mayor and city council (pending), responded to citizens, the Task Force and Greyhound by electing to retain Greyhound at the previously selected G1 site (6th Avenue and Toole). PAG is expected to endorse that site (I have emailed PAG to ask that question) (2) PAG requested new facilities be ADA complainant. As noted earlier, standard design considerations would include ADA accessible facilities, including the pedestrian bridge over the railroad. (3) PAG noted alternative facility sites north of the railroad could impact traffic on 6th Avenue
and they suggested analysis would be needed. As noted earlier, the sites north of the railroad (G2, G3, T2, T3) have been dropped from further consideration, therefore no new facilities are being considered that would affect use of the 6th Avenue Underpass. (4) PAG noted the opportunity to incorporate general public safety improvements into the project design elements. The Intermodal Center design concepts have the goal of improved public safety in the area of pedestrian/bike movements and security around the railroad and Greyhound operations.

+ AMTRAK - They are supportive of the Updated Master Plan and are pleased with the addition of a spur track at the Depot to better facilitate passenger trains. AMTRAK did express concern over maintaining the ability to refuel trains on-site. They currently refuel by truck, at two locations (eastbound and westbound trains are refueled at opposite ends of the Depot). The eastbound refueling occurs near the planned Pedestrian Bridge location. Continued access and a secure area are requested by AMTRAK. As noted earlier, the city has met with AMTRAK and will incorporate the necessary safety and access features needed.

+ Greyhound – The city and Greyhound Inc. have met to discuss relocation alternatives (temporary and permanent). Greyhound participated in the July 13 and 22, 2004 public meetings addressing relocation. Their letter of July 29, 2004 (see Appendix A) supports the G1 site due to proximity to the Ronstadt Transit Center and Depot. Additionally, Greyhound noted the connectivity would likely result in reduced energy consumption and improved air quality.

### B. Task Force

The Master Plan and Environmental Assessment processes were designed to provide a public involvement process that will carry through the planning, design, and implementation phases for the Downtown Tucson Intermodal Center Master Plan. This process explored a range of possibilities for partnerships between the City of Tucson, private sector development opportunities, and not-for-profit organizational resources that hope to be involved in the creation of the revitalization efforts of the historic depot and its surroundings.

A citizen’s volunteer Task Force was established to provide input, review alternatives, discuss issues, and make recommendations throughout each step of the master planning process. The Task Force included 29 community members representing a variety of interests, including:

+ Private real estate development
+ Tucson Arts District
+ Historical Perspective
+ Downtown Business Owners
+ Depot Gateway Vision Group
+ Citizens Transportation Advisory Committee
+ Historic Locomotive 1673 Task Force
+ Historic Preservation
+ Tucson/Pima Arts Council
Environmental Assessment
Downtown Tucson Intermodal Center Master Plan Update, 2004

- Rialto Theater
- Big Brothers, Big Sisters
- Arts District Partnership
- Tucson-Pima County Historical Commission
- Congress Hotel
- Tucson Downtown Alliance
- Chamber of Commerce
- Architect
- Tucson Jazz Society
- Access Tucson
- Arts District Partnership
- Gibson, Nakamura, & Decker, P.L.L.C.
- Pima Association of Governments
- Line by Line Editorial Services
- Citizen Representatives

The Task Force met for the first of eleven (11) meetings on October 13, 1998 at the Kick-Off meeting. The latest meeting occurred on March 10, 2004 to update the Task Force on the proposed Master Plan revisions. On July 13, 2004 and July 22, 2004 public meetings were held to focus on Greyhound relocation issues. Summaries of the Task Force and public meetings are found in Appendix B.

The Task Force has continued to provide the City with valuable insight and recommendations. Project element design will continue to involve the Task Force.

C. Public Involvement and Comments

The 2000 Environmental Assessment was prepared at the conclusion of the draft Downtown Tucson Intermodal Center Master Plan. The analysis focused on the proposed developments from that document and its effects on the surrounding environment. The first draft was completed on August 2, 1999. A 30-day public comment period followed. The FTA issued a Finding of No Significant Impact (FONSI) on August 14, 2000.

This 2004 EA was made available for public review. The document was placed at several locations for easy public access including:

- City Hall
- City Clerks Office
- Eastside City Hall
- Main Library
- Woods Branch Library
Environmental Assessment
Downtown Tucson Intermodal Center Master Plan Update, 2004

- Wilmot Branch Library
- El Rio Branch Library
- South Tucson Branch Library
- AMTRAK

Public comments were accepted during the 30-day review period. Written comments were directed to:

Ms. Kim McKay, Project Manager, Transportation Engineering Division, City of Tucson, P.O. Box 27210, Tucson, Arizona 85725-7210 or Mr. Michael Dawson, Environmental Manager, Entranco, 1860 E. River Road, Suite 300, Tucson, Arizona 85718-5636. Comments could submitted via email to Mr. Dawson at mdawson@entranco.com.

Attached in Appendix B is a copy of the newspaper notice that ran in both the Arizona Daily Star and Tucson Citizen. Through the close of the comment period on January 14, 2005 no written comments had been received.


Downtown Tucson Intermodal Center Master Plan. 1999. City of Tucson prepared by Entranco.

HOPE VI Depot Plaza/Martin Luther King Revitalization Plan. 14 January 2004. City of Tucson Community Services Department.


