is an architectural, engineering, planning and consulting firm that excels at helping clients manage complex projects and make sound decisions. As an integrated firm, more than 7,700 professionals, including architects, engineers, consultants, scientists, planners and construction managers, in 185 locations worldwide, pool their strengths to provide solutions beyond the scope of traditional A/E/C firms. HDR is No. 11 overall on the Engineering News-Record "Top 500 Design Firms" rankings for 2010, and is ranked No. 8 among Engineering News-Record's 2010 "Top 50 in Transportation".

HDR's operating philosophy is to be an expertise-driven national firm that delivers tailored solutions through a strong local presence. HDR's ability to draw upon companywide resources and expertise is a great strength in meeting and exceeding your expectations.

TRANSPORTATION

HDR has offered clients solutions to transportation design challenges for well over 85 years. HDR provides across-the-board transportation solutions to help clients in the following market sectors find creative solutions to complex challenges:

Financial | Transit | Freight Railroads | Highways and Local Roads | Private Development | Aviation | Maritime

Our presence in California for over 45 years has allowed us to build an organization with exceptional knowledge of local and state issues. Our diversity of professional disciplines reflects a commitment to offering total services and, since its inception HDR has continually broadened its fields of expertise.

The diversity of our client base is reflected in the fact that we have worked with nearly all state departments of transportation as well as numerous cities, counties, toll authorities, other government agencies and major railroad carriers in the United States. Extensive personnel resources and expertise in related disciplines allow us to address environmental, geotechnical, aesthetic, and public issues. Our expertise in public-private partnerships, economics and finance, program management and design-build delivery systems allows clients more options in managing their projects and maximizing their budgets.

HDR'S NORTHERN CALIFORNIA TRANSPORTATION GROUP

HDR's Northern California Transportation Group, located in offices in Sacramento, Folsom, Walnut Creek, San Francisco, Santa Rosa, and Sunnyvale, work together as a team, sharing resources in order to cost-effectively deliver the best possible product to clients. The group is composed of roadway and bridge sections in multiple offices. Additional sections include transit, railroad, program management, transportation planning, and construction management. Each section is led by an engineering manager and includes staff that brings unique experience and expertise to projects. This structure allows Project Managers to cost effectively staff projects by drawing on the most qualified and experienced engineers, technicians, and support staff for their projects.

TRANSIT

The roadway congestion that reigns in cities around the world is compelling authorities to focus on transit solutions to mobility problems. From India to the United States, creative transit plans are being developed to ease travelers' growing woes. HDR has the full range of in-house expertise to take a transit project of any mode from the earliest days of a feasibility study through planning, architectural design, engineering, project delivery and successful implementation. HDR works in partnership with clients to tailor sustainable mobility solutions to communities of all sizes. Project expertise encompasses virtually every type of public infrastructure, including transit and commuter rail stations and facilities; intermodal facilities, bridges and highways, waterfront esplanades, and public parks.

NATIONAL EXPERTISE

HDR has made a conscious effort to significantly increase our technical capabilities and experience in transit planning and project development. Over the past several years, HDR has acquired well known specialized firms, such as HDR|HLB Decision Economics, HDR|S.R. Beard & Associates, and HDR|Daniel Frankfurt, and has added key staff with national reputations and proven experience. As a result, HDR is now considered one of the top transit planning and project development firms in the U.S. with a proven track record in planning and delivering bus, streetcar, and rail transit projects nationwide, implemented both with and without federal funding. We also provide clients with specialized transit-related services in economic development, financing strategies, public-private partnerships, and in addressing the Federal Transit Administration (FTA).

HDR has worked on more than 120 Rapid Transit and Commuter Rail Station Projects including:

- New Stations
- Station Expansions
- Rehabilitation
- ADA Upgrade
- Intermodal Facilities
- Transit Oriented Development

HDR has national transit expertise in:

- Subway Stations
- Commuter Stations
- Transit Centers
- Transportation Buildings
- Maintenance Facilities
- Shops & Yards
- Bus Depots
- Bridges
- ADA Compliance
- NFPA Compliance
- Design Guidelines
- Scoping & Programming
- Sustainable Design

SELECTED EXPERIENCE WITH REFERENCES

Sacramento Riverfront Streetcar Feasibility Study, Preliminary Engineering, and EIR | City of West Sacramento

West Sacramento, California

In partnership with the Cities of West Sacramento and Sacramento, the Sacramento Regional Transit District, and the Yolo County Transportation District, HDR has completed feasibility analysis, planning, conceptual engineering, and environmental review for a proposed 2.5-mile urban streetcar system connecting a redevelopment area of West Sacramento with downtown Sacramento and the Uptown neighborhood of Sacramento. The proposed $70 million streetcar system is expected to traverse the historic Tower Bridge over the Sacramento River, share track in places with Sacramento Regional Transit's existing light rail system, improve local traffic circulation, support intense and sustainable redevelopment, and complement other components of the local and regional transportation system. The HDR Phase 1report was unanimously adopted by all four governing bodies in May of 2007. The HDR team also performed Phase 2, which includes Preliminary Engineering, a CEQA environmental document, and a Finance Plan to support the project. As requested by the agencies, the HDR team has prepared a scope-of-work for Phase 3, which would take steps to implement the project, including support for forming the Joint Powers Authority, preparation of intergovernmental agreements, formation of assessment districts, adding the streetcar to Tax Increment Financing budgets, working with City Staff to implement parking fee increases, providing vehicle procurement support, and procuring necessary permits.

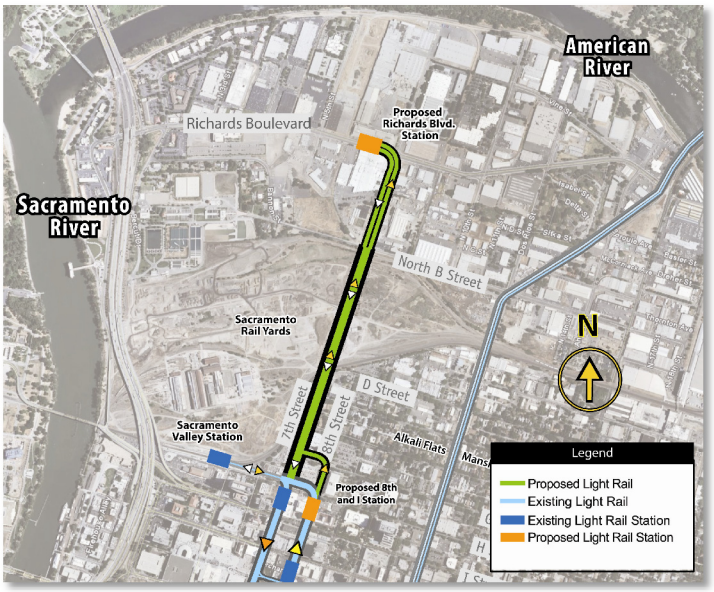
Reference:

Maureen Pascoe
Redevelopment Director
City of West Sacramento
1110 West Capitol Avenue
West Sacramento, CA 95691
(916) 617-4635

Downtown-Natomas-Airport Light Rail | Sacramento Regional Transit

Sacramento, California

RT is planning to expand light rail between downtown Sacramento and the Sacramento International Airport. The initial Minimum Operating Segment (Green Line Segment) is approximately one mile long and connects downtown Sacramento to Richards Boulevard. HDR was selected to perform the Transitional Analysis, Environmental and Engineering Services, including completion of environmental clearances and engineering to allow the Green Line to proceed to construction in 2009, to conduct an independent review of strategies to reduce the cost and maximize ridership of the entire DNA line, and to develop a strategy for developing future operating segments that can be funded, permitted, and constructed.



Green Line Segment: For the one-mile light rail transit extension from H Street in downtown Sacramento to Richards Boulevard, HDR completed 30% plans, specifications, and a cost estimate in 9 months. Simultaneously, HDR and its team completed the Draft and Final EIR, and completed all necessary steps, including published notifications and orchestrations of public workshops, to assure full compliance with the California Environmental Quality Act. To meet this schedule, HDR quickly produced several alternatives and presented recommendations to the numerous stakeholders until consensus was achieved on the project configuration, which was then used as the basis for the 30% design and environmental documents. The one-mile project included several unique complications, including an underpass and at-grade crossing of Union Pacific Railroad Track, segments of shared street-running, reconfiguration of bike paths, and phased integration with two very significant developments. HDR worked closely with the City of Sacramento to receive their approval of the conceptual design.

Under a separate task order, HDR worked with Regional Transit's Engineering, Procurement, and Legal staff to prepare Regional Transit's first design-build procurement documents. HDR also provided a key role in helping Regional Transit to successfully complete the procurement process within an aggressive six-month schedule.

HDR kicked-off the project with a Cost Risk Analysis-Value Engineering that identified project challenges and creative solutions by bringing together project stakeholders, and the outgoing and incoming technical teams. For the 12-miles from Richards Boulevard to the Sacramento International Airport, HDR and its team has been working with SACOG's Travel Demand Forecasting Model to achieve significant improvements in the forecasted ridership. HDR will be preparing updated cost estimates. Based on the cost and ridership estimates, HDR will recommend a phasing strategy for completion of the project, which is expected to move forward through the FTA New Starts Program.

HDR is currently moving forward with work on the concept design for the extension to the north of the Green Line segment and has prepared plan, profile, and typical sections.

Reference:

RoseMary Covington
Assistant General Manager of Planning and Transit System Design
Sacramento Regional Transit District
1400 29th Street
Sacramento, CA 95816
(916) 556-0340

Hennepin County Intermodal Facility and Transportation Interchange | Hennepin County

Minneapolis, Minnesota

The Hennepin County Intermodal Facility and Transportation Interchange is located in Downtown Minneapolis near the new Target Field (Twins Ballpark). HDR provided concept planning to analyze multiple modes of transportation converging into the area. A transportation interchange placed within this area will enable easy access for everyone among the various transportation systems serving the state of Minnesota and the Midwest Region.

Conceptual rendering of mezzanine and 5th Street

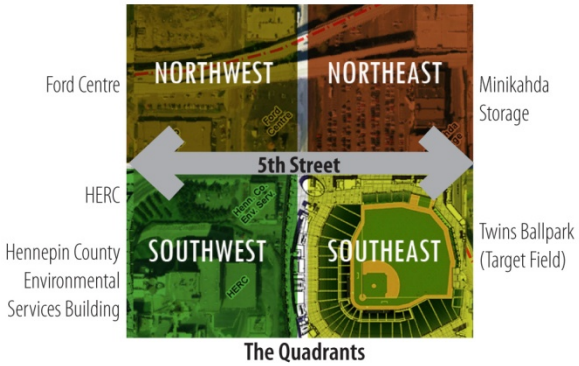
The facility will ultimately support the context of the area by respecting the neighborhoods, commercial, residential, and the natural and built surroundings. Hennepin County hired HDR to conduct a collaborative week-long workshop to identify specific needs and requirements for a proposed transportation interchange. The goals of the workshop were to: understand short-term and long-term needs by having the stakeholders involved, optimize connectivity and way-finding, enhance mobility, community and environment, create bold concepts for the future and incorporate sustainable solutions.

Conceptual rendering of the intermodal facility's interior at 5th Street

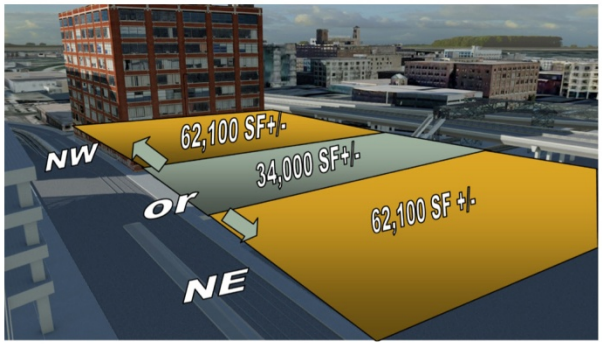
The study identified short- and long-term space and capacity needs for both public and private usage and creating conceptual options to address the connectivity of moving people and goods within the project area. The concepts accommodated the short-term and long-term openings of multiple transportation modes in the project area, light rail transit lines, commuter rail lines, the intercity passenger rail, high speed rail from Minneapolis to Chicago, and Cedar Trail Multi-use Pathway.

Northwest Quadrant Concept from 6th Avenue facing downtown Minneapolis (east)

Based on the future estimate of passengers for each of the modes, there will be over 12,000 passengers daily within the Hennepin County Intermodal Facility by 2030. With this number of passengers, the intermodal facility will need to be approximately 96,100 square feet in size. The program for this building includes essential customer areas such as a lobby, circulation, waiting, restrooms and retail spaces as well as support spaces required for luggage handling, ticketing, maintenance and other staff related operations. Two concept options were identified as a result of this workshop and will require further study; they are located on the NW and NE quadrants respectively.

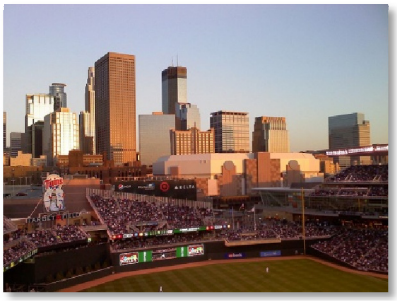


The Quadrants



The 34,000 SF Hennepin County Intermodal Facility (along with either the NW or NE quadrant option) will provide the essential mezzanine level and vertical circulation elements necessary for passengers to access the LRT corridors on the 5th Street level as well as the commuter rail, intercity rail and high-speed rail corridors on the lower "freight" level. Users arriving by auto will enter at the mezzanine level to connect with desired transit modes. The intermodal facility will also include space for rail operations and station staff, passenger circulation and services, in addition to retail and convenience amenities one would expect to find at a world class, sustainable transit hub.

Special Event Riders



A potential of 12-15,000 Target Field attendees could be expected to take transit to and from the games when the full service levels are implemented. Dealing with these crowds, primarily at the time the game ends, has been problematic at numerous ballparks around the country. Because attendees cannot immediately board trains for their trip home, queue space must be provided with a corral system to direct attendees to their proper train and provide an orderly place for them to wait.

For planning purposes, a capacity game crowd is projected, but not all game attendees are projected to leave in the hour immediately after the end of the game. Findings from other ballparks indicate that about 90 percent will leave the ballpark within the initial hour, resulting in 11-13,000 attendees that need a place to stand and board. Assuming approximately four square feet per person, around 50,000 square feet of queue space is needed. The current square footage of the esplanade surrounding the ballpark is not adequate for this queue space.

To handle these capacity crowds and to help organize the queuing for each individual train, an additional game day platform is recommended. This platform can be located near the end of the tail tracks currently under construction, near the entrance to the Hennepin Energy Resource Center (HERC). Queue space will be provided by lengthening and widening the esplanade over all tracks on the south side of 5th Street and extending this assembly space all along 5th Street to the platform. Additional queuing space is provided alongside Target Field by the recommended relocation of the LRT platform to the north side of 5th Street. During game days, 5th Street should be closed to auto traffic, which allows the travel lanes to be used for queue space. Approximately one-third of the queue space could be provided on 5th Street, with the remainder using the extended esplanade to the additional boarding platform by the HERC.

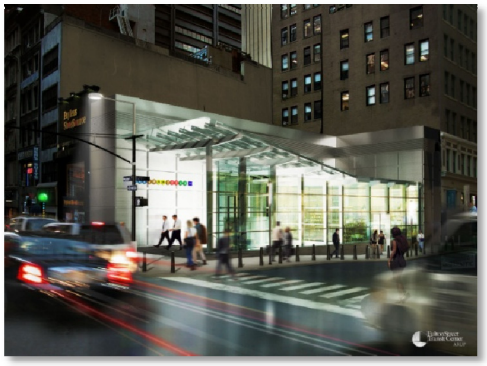
Operationally, the LRT services would be assigned to one of the two stations. For example, Hiawatha and Central riders would queue up in front of Target Field, while Southwest and Bottineau riders would queue up on the extended esplanade. An additional boarding stream would be provided down to the commuter rail platform below. Signage would direct attendees to the appropriate line for their queue. Tents could even be provided to shelter the queues. This service division approach has been used by several systems, notably the DART system in Dallas.

Reference:

Phil Eckhert
Hennepin County
417 North 5th Street, Suite 320
Minneapolis, MN 55401-1362
(612) 348-6445

Fulton Street Transit Center | New York, NY

New York, New York



HDR served as Project Manager and Chief Architect for all five subway stations affected by this $1.7B project, as well as numerous above the ground station entrance buildings. A team of HDR architects, structural and civil engineers worked on this project from preliminary design through construction document completion, and is assisting with construction phase services.

Construction of the new Fulton Street Transit Center is planned to (1) create a focal point for entry to the downtown rapid transit system and to provide improved connections and way-finding among six major subway routes that service the area, (2) provide for a new underground corridor that will be extended into the redeveloped PATH Terminal/World Trade Center site and points west, and (3) street access to various points within the complex will be added or improved, and the existing subway stations within the complex will be rehabilitated and reconfigured to enhance interconnections.

HDR's role on this project is architectural design services for all subway stations and station entrances within the complex (R/W, 4/5, A/C, J/M/Z and 2/3 lines) as well as the new below ground Dey Street Concourse. HDR also designed the new Dey Street Head House building and private property entrances through 129 Fulton Street and 135 William Street (both historic district buildings). Close coordination was required with SHPO to obtain approvals for the historic entry building work, as well as for the removal of portions of the historic 4/5 station eastern wall. This stations portion of this project also included a substantial ADA Accessibility effort that resulted in the design of 11 ADA elevators and 2 escalators. Some of the greatest challenges faced by HDR on this project were the coordination with a very large multidiscipline team working not only from a central project office, but also from satellite offices. Proper communication with the team was essential due to the complexities involved in this project which required the structural engineers and architects to work hand in hand to realize solutions that were both cost effective as well as being appropriate to the design intent of the project.

HDR was responsible for all subway station architecture and structural engineering and leading the coordination of the related station area engineering disciplines. This included close coordination with civil/utilities engineers; mechanical, electrical and plumbing (MEP), elevators/escalators; lighting; signage; as well as identifying all private property easements that resulted from new station entrances, several of which were through historic landmark properties. Construction phasing, maintenance and protection of traffic (MPT), constructability, and value engineering (VE) reviews were also included in this work. HDR was also responsible for the cost/risk model used by the U.S. Federal Transit Administration (FTA) for this project. HDR's in-house rendering capabilities were essential to the MTACC for public relations/information purposes. This project is currently in construction and will be completed by 2012.

Reference:

Veronique Hakim,
Executive Director
New Jersey Turnpike Authority
PO Box 5042
Woodbridge, NJ 07095-5042
ronmta@msn.com

Central Phoenix/East Valley Light Rail Transit Project | Valley Metro Rail

Phoenix, Tempe, Arizona

HDR used sophisticated risk analysis to help the Valley Metro Transit Agency secure Federal Transportation Authority New Start Funds for the Valley METRO Light Rail project, a $1.4 billion, 20-mile starter system in Phoenix. HDR has been an active part of the light rail project since 1996, working as planners, engineers, station architects, public involvement coordinators and program managers for the project since its conception.

The light rail system has created hundreds of jobs and significantly increased redevelopment efforts along the line. The City of Tempe alone attributes $4 billion in projects to the influence of the light rail and the Cities of Mesa and Phoenix have also praised the system for bringing developers and new businesses to their communities. HDR is currently working on both the planning and design of future extensions of the rail system, with the first extension planned to open to the public in 2012.

Reference:

Wulf Grote, PE
Deputy Executive Director
Valley Metro Rail, Inc.
101 North 1st Avenue, Suite 1300
Phoenix, AZ 85003
(602) 322-4481

ADDITIONAL PROJECT EXPERIENCE

"The Hub": 149th Street/3rd Avenue Station Expansion and Modernization | New York City Transit Authority

New York City, New York

The Hub is the busiest subway station in the Bronx and one of the major intermodal transfer points; it also serves a large commercial and office complex. A concern of the New York City Transit Authority (NYCT) was that the subway station was not designed to handle this large volume of intermodal transfers. An additional concern was the heavy passenger volume from the free bus-to-train transfer for the Third Avenue and Bx55 bus passengers. During rush hours, these buses arrive every 90 seconds.

HDR, as prime consultant to NYCT and transportation and structural engineers, designed station expansions and modernizations to include expanded control areas, new transfer stairs, passageways, and elevators with reconfiguration of the street level curbs and sidewalks. This new design provided more direct paths of travel and improved the security of the intermodal transfer.

Structural challenges involved expanding the station control areas beneath The Hub intersection, the busiest traffic areas in the Bronx. Decking was designed to maintain traffic while construction could proceed below ground.

Major utility work included rerouting sewers, water lines, gas mains, ECS telephone duct banks and Con Edison electrical ducts. Major New York City Department of Environmental Protection Drainage Plan revisions were required to reconfigure sewers around the station widening.

Moline Transit-Oriented Development Study | S.B. Friedman & Company

Rock Island County

The Rock Island County Metropolitan Mass Transit District (MetroLINK), along with the City of Moline and Renew Moline, engaged consulting services in March 2009 to prepare a conceptual, idea driven transit-oriented development study of the area surrounding MetroLINK s Centre Station facility in downtown Moline. The study also includes conceptual planning of a new intermodal transit center. Centre Station currently serves as a major regional bus transfer station and terminal, and is proposed to add an Amtrak Passenger Rail Station, re-establishing passenger rail service to the Quad Cities communities that has not been available since 1978.

S. B. Friedman & Company teamed with HDR, DLK and Gewalt Hamilton to produce a conceptual station plan and Transit-Oriented Development (TOD) plan for the proposed Quad Cities Amtrak Station in Moliine, Illinois. The objective was to deliver a focused TOD plan that builds on the previous planning efforts for Downtown Moline and the recent redevelopment activity in the area. The plan also optimizes the physical relationship and connections between the transit facility and the surrounding district and promotes the numerous synergies that exist between transit service and real estate development.

HDR s duties focused on four tasks: 1) identify the existing conditions in the station area; 2) determine ridership for the various transit modes (local bus, intercity bus, and Amtrak); 3) identify the program needs for four transit modes (local bus, intercity bus, Amtrak, and future commuter rail), and determine how these needs can be met at the Centre Station site; and 4) develop funding and implementation strategies to help bring the project to fruition

HDR conducted numerous interviews with Amtrak, the freight railroads and IDOT to determine the station needs from the various stakeholders perspectives. Estimates for the space needed for ticketing area; waiting room/departure lounges; bus bays and train loading zones; and parking were developed. Patron and vehicle circulation patterns were considered and the conceptual facility layout was designed to minimize walking distances for transfers and for access to the redevelopment area. The conceptual plan for the station resulted in a short-term build out of the existing Centre Station to accommodate new Amtrak service, with a second phase developed to accommodate a growing Amtrak ridership and new commuter rail.

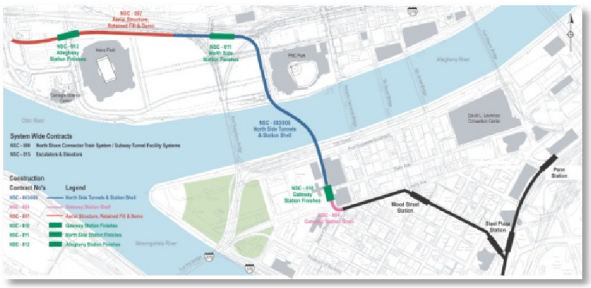
Rail Runner Commuter Rail | Mid-Region Council of Governments

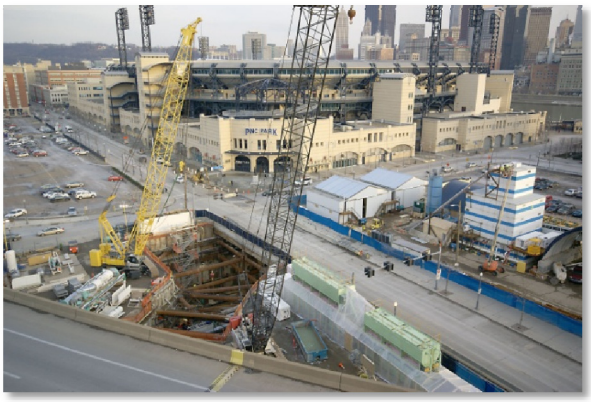
Albuquerque, New Mexico

About half of the state's 2 million-plus people live between Belen, a suburb south of Albuquerque, and Santa Fe. With increasing traffic volume and a need to accommodate travelers in this growing region – and geographical constraints that make the ability to widen highways or build new ones extremely difficult – New Mexico began looking at mass transportation alternatives. A study determined that commuter rail was a feasible choice. HDR provided program management, railroad operations support, design services and environmental studies for the Rail Runner project. Phase 1 was designed with nine stations and runs from Belen to Bernalillo. Costly right of way acquisitions for the 46-mile portion were avoided by purchasing BNSF railroad right-of-way through the region. Rail Runner now provides critical intermodal connections to local bus, Amtrak and Greyhound service at the Alvarado Transportation Center in downtown Albuquerque, which is less than a 15-minute walk for almost 20,000 downtown Albuquerque workers. The day Rail Runner began operations it brought commuter rail service to more than 500,000 people.

North Shore Connector Program and Construction Management | Port Authority of Allegheny County

Pittsburgh, Pennsylvania





The Port Authority planned its new transit connector to improve transit service and economic development in Pittsburgh on both sides of the Allegheny River. HDR, in a joint venture, is providing both program and construction management for this $390 million project. It will extend light rail transit (LRT) service from the existing Gateway Center Station in Pittsburgh's Golden Triangle through twin tunnels under the Allegheny River to the North Shore terminus, a distance of about 1.4 miles, adding an important access route to the Pittsburgh Steelers' Heinz stadium and the Pittsburgh Pirates' PNC Park. The project also includes a 0.2-mile link between the existing Steel Plaza LRT Station and Pittsburgh's convention center. An intermodal transportation center will include a 17,000-space, four-level parking garage designed to interface with enhanced bus service, retail spaces, a transit center lobby and space for bicycles. A second new station will be at PNC Park. A new station headhouse building (entrance) and platform will be incorporated into the existing Gateway Center LRT station for travel to and from the North Shore.

Kansas City Intermodal Facility

Gardner, Kansas

Kansas City is a critical location for the United States supply chain, sitting at the intersection of four Class I railroads and a number of significant interstate highways. It is a Missouri/Kansas bi-state metropolitan area that drives consumer consumption and acts as a conduit for goods movement to Chicago and the East Coast. Supporting goods movement to, from and along this corridor on BNSF Railway's (BNSF's) Southern Transcon main line, BNSF's Argentine Intermodal Facility provides international and domestic lift capacity for 285,000 units annually.

Located near Kansas City, Argentine is ranked eighth among BNSF's entire hub network, comprising over 30 intermodal hub facilities. Argentine is a 45-acre, land-locked facility established in the early 1970s as part of a larger rail operations development, including a fueling and inspection stop for eastbound and westbound trains, crew change location for main line traffic and the busiest classification yard in BNSF's system.

With growth in consumer goods in recent years, Argentine's physical capacity has been exceeded and is not sustainable without negative impact. In 2008, the facility performed well over 331,000 lifts and has handled approximately 370,000 lifts per year in the recent past, exceeding its sustainable capacity by almost 30 percent. This consistent lift volume over facility capacity strains rail fluidity, drives localized truck congestion and threatens modal diversion to long-haul truck, which would impact supply chain efficiency.

Work that HDR conducted at the initial site included developing concepts, environmental permitting and final engineering design. HDR also handled environmental permitting (404) and associated National Environmental Policy Act (NEPA) work, coordination with federal, state and local agencies and the design of site, track, facilities, utilities, electrical and other elements.

The new site, called the Kansas City Intermodal Facility (KCIMF), will replace the Argentine Intermodal facility, improving access to cost-effective, low-emission intermodal service between the central Midwest and ports and other major markets in the United States, using BNSF's transcontinental and I-35 trade corridors.

The 492-acre, approximately $200 million KCIMF will have the capacity to handle 1 million containers annually, far more than the overflowing facility at Argentine Yard. The new facility will provide the region surrounding Kansas City access to BNSF's network of over 30 intermodal hub facilities, including links to the ports of Los Angeles, Long Beach, Seattle and Tacoma on the West Coast, gulf ports such as Houston and Galveston and major inland markets such as Dallas-Fort Worth, Memphis, Atlanta and Chicago.

KCIMF will serve the transportation requirements of a future, independently-developed and owned, adjacent but separate logistics park--the Logistics Park Kansas City. It is anticipated to be established in phases based on potential future economic demand.

HDR has provided BNSF a variety of engineering and environmental services in support of the project. We had completed a traffic study, which was followed by a concept design study and development of a request for proposals for solicitation of developers, including an economic analysis. We were later awarded the final engineering design, permitting and environmental analysis for the facility.

HDR assisted in development of a design-build package for facilities, including bidding assistance, bid services, engineering track and site work.

Garrows Bend Intermodal Facility | Alabama State Port Authority

Mobile, Alabama

HDR is developing plans for an intermodal rail transfer facility (ICTF) in Mobile as part of an overall plan of development to increase container capacity for the Alabama State Port Authority (ASPA).

ASPA is the 11th largest port in the nation, based on 2005 total tonnage. The port features 37 berths, including the McDuffie Coal Terminal, a bulk material handling plant, 27 berths for general cargo/intermodal and a liquid bulk terminal. The ASPA also owns and operates a terminal railroad. Recognizing rapid, regional growth in manufactured products and the market trend toward container trade, ASPA has developed a 20-year master plan to improve container handling capacity at the port, generate employment opportunities and better serve manufacturing and industry interests in the region.

Current projects scheduled for construction pursuant to ASPA's master plan are anchored by a 120-acre container terminal at Choctaw Point (Mobile Container Terminal); an 80-acre ICTF at Garrows Bend (Garrows Bend ICTF); and rail connections and improvements associated with the Garrows Bend ICTF and McDuffie Coal Terminal.

Major project elements include:

- Land reclamation - The land needed for the Garrows Bend ICTF is currently at the bottom of the Mobile River. In this regard, in preparation for construction, ASPA will conduct a land reclamation operation at Garrows Bend requiring 1.5 miles of dike and over 1,200,000 cubic yards of fill.
- Rail Connections - The Port of Mobile is served by five Class 1 railroads and a 4-day rail ferry service to Coatzacoalcos, Mexico. In addition, the ASPA owns and operates a short-line railroad (TASD) that provides switching and terminal services to all rail carriers. ASPA's objective is to provide intermodal capacity within the existing infrastructure. The project buildout will include features to minimize conflicts associated with the new intermodal and existing traffic, and optimize the efficiency of the facility.
- Garrows Bend ICTF - The objective of the site design is to optimize loading and unloading of containers from rail and the storage of containers on-site. The project has been designed to allow alternative configurations within the yard, giving the operator the flexibility of using either gantry cranes or piggy packers for loading and unloading operations. ASPA has phased the project to bring portions on-line consistent with demand. Phase I will include three working tracks, the chassis storage area, and sufficient rail connections to begin operations.

Phase I design will be constructed consistent with the plan for overall buildout, allowing the facility to grow with demand with minimal interference to rail and vehicular traffic. Upon completion, this series of projects will add value and capacity to Alabama's rail and port infrastructure.

Oakland UPRR Intermodal Facility Design | Union Pacific Railroad

Oakland, California

HDR assisted UPRR in consolidating its two Oakland Intermodal facilities into one new facility. Project design accommodated construction staging so the facility could remain in operation. The facility consists of 6 intermodal yard tracks, approx. 4,400 track feet each, asphalt and concrete craneways, truck trailer storage areas (1500 containers and trailers) and employee parking lots.

UPRR was responsible for preparing the railroad alignment, civil and paving designs as well as the contract documents. As UPRR's prime consultant, HDR reviewed UPRR's designs and contract documents for drainage facilities, a storm sewer lift station modification and two new buildings. HDR also provided construction phase and other design support services. HDR used an Internet accessible design review process known as ARMS (Automated Review Management System). This system, created by the U.S. Army Corps of Engineers (USACE), provides a database and software that allows reviewers to comment and designer to respond electronically.

View of completed Phase 1 Construction from the north

View of completed Phase 1 Construction from the south

Joseph Scelsi Intermodal Transportation Center | Berkshire Regional Transit Authority

Pittsfield, Massachusetts

As part of a downtown revitalization movement begun in 1998, the Berkshire Regional Transit Authority (BRTA) hired a joint venture of HDR and McMahon in January 2001 as the project and construction management firm assigned to carry out and oversee the planning and construction of a $10 million, state-of-the-art Intermodal Transportation Center (ITC). The project, completed in November 2004, is located in the western-Massachusetts city of Pittsfield.

The ITC has been designed to link 18 existing local and intercity bus lines with connections to Amtrak rail service, paratransit vehicles and taxi service. The ITC also includes short- and long-term vehicle parking, bicycle-storage options, a police substation, 940 square feet of retail space for passenger amenities such as a newsstand or coffee shop, 3,300 square feet for office tenants and 3,700 square feet of office space for a new headquarters for the BRTA.

The project, funded 80 percent by federal sources and 20 percent by the Commonwealth of Massachusetts, was originally planned to occupy a deck over the existing rail line. The joint venture was able to provide a far more cost-effective strategy by relocating the ITC at grade level through a combination of extensive re-grading, structural fill, retaining walls, and structured parking that includes a lower-level for short- and long-term parking associated with the Center.

By making the most of available resources, HDR and McMahon were able to help the BRTA more fully accomplish its vision of an ITC that ties together transportation resources throughout the entire western Massachusetts region. It also provided a much-needed development stimulus to the revitalized inner city of industrial Pittsfield, benefiting travelers and the general economy of the region alike.

The range of services provided by the joint venture for the Berkshire ITC project also included:

- consultation on property acquisition;
- assessment of private sector, joint-development opportunities;
- environmental assessment and permit consultation;
- design management, scheduling, and cost control; and
- construction management.

In addition, the project management team worked closely with a Project Advisory Committee that consisted of city officials, transportation providers, local business interests, representatives of organizations providing services to the disabled and elderly, and the BRTA's partners in the Pittsfield Metropolitan Planning Organization. The BRTA and project managers also held a number of public meetings to solicit input regarding the project.

North Corridor Project | Metropolitan Transit Authority

Harris County, Texas

In November 2003, Houston-area voters approved the METRO Solutions transit system plan and granted approval for the Metropolitan Transit Authority of Harris County, Texas (METRO) to issue up to $640M in long-term bonds to help fund implementation of the $1.23B system through 2012. The METRO Solutions plan calls for five extensions to be added by 2012 to the 7.5 miles of light rail METRO opened in January 2004. METRO intends to complete construction by 2012 in the North, Southeast, Harrisburg, University, and Uptown corridors. The corridors are to be implemented utilizing a Facility Provider (FP) as defined in the Hybrid Delivery System as described in Texas House Bill 2300.

HDR is a subconsultant to a local engineering firm on the North Corridor project. While planned as both a LRT and BRT system, the North Corridor is presently proposed as a full LRT line. The project will extend the existing Main Street Light Rail Transit (LRT) along Main Street to an Intermodal Terminal in the vicinity of Burnett Street, a distance of approximately 0.53 miles. From there the LRT will continue northbound through the near northside neighborhoods to the Northline Mall area, a distance of approximately 5.16 miles. HDR provided project and engineering management, design of track and structures, drainage studies, and project controls services.

Conceptual Preliminary Engineering, which began in May 2006 and was completed in December 2006, brought the project design to a level of 30% completion. The Advanced Preliminary Engineering (APE) on the North Corridor under the FP Phase I Contract with METRO began in May 2007. This work consisted of performing the necessary APE with LRT as the design basis. The APE effort produced plans and specifications to a level to allow the FP to develop a Fixed-Price-Proposal (FPP) for construction of the project.

HDR was responsible for: management of all design activities on the project including the guideway alignment for LRT and BRT, roadway modifications, traffic engineering, architecture, structural, urban design, station area planning, drainage, and utility relocations; structural engineering of the retrofit/rehabilitation of the Main St. Bridge over White Oak Bayou, built in 1911, to carry two LRT guideways along with two lanes of vehicular traffic and pedestrian sidewalks; design of the LRT alignment and trackwork; systems design during the CPE; a master drainage study using SWMM; QA/QC; and project scheduling and cost control.

Pier B Rail Yard Infrastructure Program | Port of Long Beach

Long Beach, California

The Pier B Rail Facility is the key component in the Port of Long Beach, Calif., rail system, serving as the primary railcar storage and staging facility supporting the Port's limited on-dock rail yards. Upgrading the facility infrastructure will ultimately enhance goods movement not only in the Port itself, but also throughout Southern California and the nation. It will improve air and water quality and increase energy efficiency through the incorporation of sustainable design elements and the use of environmentally friendly container movement technologies. Specific aspects of the work include:

- Realignment of B Street to accommodate new yard tracks
- Construction of about 80,000 feet of new trackage
- Design of classification yard facilities and/or a potential near dock intermodal rail transfer facility (ICTF) in the North Harbor area
- Feasibility studies and alternative analyses for potential grade separations at 9th Street and the North Harbor Area
- Adherence to the Port's Green Port Policy

Holyoke Transit Oriented Design District | City of Holyoke

Holyoke, Massachusetts

HDR led a multidisciplinary team in providing preliminary designs for roadway, drainage, and streetscape improvements intended to aid in the revitalization of downtown Holyoke, Massachusetts. The initial work was funded by a Transit Oriented Design grant from the Commonwealth of Massachusetts, and the HDR team is assisting the City in seeking additional funding to bring the project through final design and construction.

The project involves improvements to three diverse streets:

- Dwight Street serves as main gateway to the civic center area, passing City Hall and municipal offices and connecting the business district to the historic industrial canals now being revitalized.
- Heritage Street runs adjacent to Heritage State Park, which features museums, open space, and an historic carousel. This roadway is envisioned as a flexible space, which can serve as a thoroughfare during business hours, and also be closed-off as a pedestrian area during special events.
- Front Street runs through a more residential district, and connects to a park on the Connecticut River.

The overall project goal is to enliven the downtown area, attract residents and businesses, and correct basic infrastructure deficiencies, including combined sewer systems, antiquated lighting systems, and non-ADA compliant sidewalks and crosswalks. The work also directly ties to another HDR project in downtown Holyoke - the conversion of an abandoned historic fire station into an intermodal center serving local and regional transit operators.

Ship Creek Intermodal Center | Alaska Railroad Corporation

Anchorage, Alaska

HDR provided agency scoping for the NEPA process for the Alaska Railroad Corporation s proposed Anchorage Intermodal Transportation Center, located on the railroad s property in the Port of Anchorage. Tasks include: literature review and consultation with ARRC; development of a stakeholder list; preparation and holding an agency scoping meeting and separate public scoping meeting; and preparing a scoping summary. In the NEPA phase of the project, HDR prepared an environmental assessment (EA) document that covered analysis of noise, air quality, traffic impacts, geotechnical and site assessment evaluation, Section 4(f) (historic resources) analysis, and development and refinement of alternatives. The alternatives work required demands estimates, design criteria, conceptual designs, and rail engineering.

Redevelopment of Union Station | Pioneer Valley Transit Authority

Springfield, Massachusetts

HDR was retained by the project sponsors, the Springfield Redevelopment Agency (SRA) and the Pioneer Valley Transit Authority (PVTA), to prepare a Redevelopment Plan for Union Station in Springfield, MA. The goal of the Plan is to convert the station into an Intermodal Center serving the City and entire region, connecting together onsite existing Amtrak passenger service with nearby inter and inner-city bus service, anticipated commuter rail, as well as taxi and airport shuttle service. Over $60 million in various State and Federal funding grants have been earmakred and set aside for the project contingent upon the sponsors being able to produce a viable plan to develop and operate the facility in a long-term sustainable manner. The objectives posed to HDR were to create a 21st century transit facility that maximizes the intermodal transportation attributes of the station; to adaptively reuse and revitalize a historic structure; to ensure that improvements are feasible and sustainable; and to spur local development over the longer-term.

Union Station was constructed in 1925. Since 1838 there have been four stations in this location, which serves as the historic rail gateway to Springfield. This Western Massachusetts city thrived on manufacturing for over 150 years and was home of the massive Springfield Armory and related industries that supplied weapons and machinery for all US military conflicts up to Vietnam. The 200,000 square foot passenger station complex, including the three story main Terminal Building, has been closed and deteriorating since the 1970's.

HDR compiled a team of market economists, transit specialists and architects to provide planning for the project with the end objective of producing a practical, sulf-sustaining, restored Union Station.

HDR worked with the local sponsors to create a physically and financially feasible redevelopment plan. Out of more than 15 design scenarios, the Plan was narrowed down to three final options. HDR's recommended option, which serves as the basis of the Redevelopment Plan, achieves all the program requirements by incorporating a restored terminal building to house transit functions, covered bus berthing, a 400 space parking garage and accessibility improvements to the train tracks. As envisioned, pedestrians, cars, taxis, local buses, intercity buses, regional rail, intercity rail, and high-speed rail will all converge in or be adjacent to the Station and passengers will flow through a restored Central Hall and Waiting Area.

HDR's Redevelopment Plan takes a grounded approach based on well-defined objectives, available funding, economic viability and the realities of the real estate market, and recommends a framework for success which meets these criteria.

MARTA Proctor Creek Line Section and Station | Metropolitan Atlanta Rapid Transit Authority

Atlanta, Georgia

HDR was section designer for three continuous design sections on the Proctor Creek Branch of the Metropolitan Atlanta Rapid Transit System. The sections included 3,100 feet of aerial structure, 4,900 feet of at-grade line, and 1,000 feet of cut-and-cover subway through some of Atlanta's more rugged terrain. Complete design services including civil, structural, utility, architectural, landscaping, mechanical and electrical design were provided for the 9,000 feet of line and the Bankhead Highway Station. This section also included a temporary railroad runaround and bridge for the main line track formerly owned by Louisville and Nashville, now owned by CSXT, and a detailed design of the temporary excavation support system. Bankhead Highway StationAllain and Associates performed architectural design services for the Bankhead Highway Station under subcontract to HDR. The Bankhead Highway Station and surrounding parking and bus access areas were designed to be compatible with the setting and to minimize disruption to the community and adjacent environment. MARTA trains would arrive at the Bankhead Highway Station below-grade; passenger access is at-grade through a conventional above ground structure. Free intermodal transfer would be provided with the MARTA surface bus system. Aerial Structure Four aerial structures, totaling 3,100 feet were included in construction unit CP 210 and CP 230. Span lengths vary from 70 feet to 90 feet. To provide the most economical structure possible, the aerial structures were designed with several construction alternatives. These included precast prestressed concrete deck slabs on prestressed concrete or steel girders; cast-in-place concrete deck on prestressed concrete or steel girders; monolithic post-tensioned cast-in-place concrete superstructure; and precast prestressed concrete segments, tied together by post-tensioning.

Steve L. Hiatt

Northern California-Pacific Transportation Business Group Manager

Education
B.S., Civil Engineering, University of California, Davis, 1982

Professional Registrations
Professional Engineer, Structural, California, No. 3258

Professional Engineer, Civil, California, No. 40772

Professional Engineer, Civil and Structural, Nevada, No. 013798

Professional Engineer, Civil, Colorado, No. 29298

Professional Engineer, Civil, Oregon, No. 74934PE

Professional Engineer, Structural, Utah, No. 5662972-2203

LEED Accredited Professional – 2004

International Code Council (ICC), Reinforced Concrete Special Inspector, No. 81293-5

Professional Affiliations
American Public Works Association (APWA), Sacramento Chapter, Past President

International Conference of Building Officials (ICBO), Member

Industry Tenure
28 Years

Professional Experience

Mr. Hiatt is a Vice President and the Northern California – Pacific Area Transportation Business Group Manager, responsible for transportation projects throughout Northern California. Mr. Hiatt has more than 25 years of experience in Northern California with transportation and bridge projects. His work has focused in both the Design and Construction Management phases of projects. He also has had significant roles in the design and management of large Design Build projects, up to $180 million in construction costs. In addition, Steve brings a sustainability emphasis to projects, being a Leed ™ Accredited Professional. Mr. Hiatt currently serves as the Past President of the Sacramento Chapter of American Public Works Association.

Project Experience

Railyards Redevelopment – City of Sacramento, California. Principal in charge for the proposed 240-acre, mixed-use urban infill project to include 10,000 residential units, 1.3 million square feet of retail, 3 million square feet of office, an intermodal transportation center and a sports arena. The project included the major land development entitlement processing of the project EIR, Specific Plan, and Tentative Subdivision Map through the City of Sacramento of a Tentative Subdivision Map. The work included the preparation of master utility studies for sanitary sewer, storm drainage, and water systems.

Reno Depressed Trainway Studies – City of Reno, Nevada. Project manager in charge of preparing studies on the $200 million Depressed Trainway project. Tasks include preparing reports for conceptual costs, conceptual alignments for the ultimate profile and temporary shoofly, project constructability, and estimates of the construction duration.

Reno ReTrac Design/Build – City of Reno, Nevada. As a subconsultant, served as design project manager to the prime team responsible for all bridge design and roadway improvements. The $200 million depressed trainway project included 10 precast prestressed bridges crossing over the trench and a pedestrian structure. Several of the crossings were constructed in stages to allow traffic to continuously use the roadway during construction.

Historic Building Seismic Evaluation – City of Sacramento, California. Inspection and preliminary seismic evaluation of unreinforced masonry buildings constructed circa 1890, Southern Pacific Railyards.

I-80 EB Cordelia Truck Scales Relocation Project – Solano Transportation Authority, Cordelia, California. Oversaw preparation of PS&E and prepared a Project Construction Schedule (Critical Path Method) for this PS&E on a fast track schedule for the new Class B truck scales facility and seven covered inspection bays. Project elements include truck screening and sorting by use of Weigh-In-Motion scales and signal bridges, widening eastbound I-80, and extending the exit ramp to the facility, and a new two-lane exit ramp from eastbound SR12 for trucks exiting the scales to eastbound I-80.

Exposition Boulevard Extension – City of Sacramento, California. Project manager and structures representative in charge of construction management for a connector route between State Route 160 and State Route 51. Major components of the project included an underpass structure supporting two tracks of the Southern Pacific Main Line, a storm water pump station, retaining walls, and realignments to State Route 160 and Leisure Lane. Services included the negotiations of all change orders and claims management.

Crows Landing Bridge – Stanislaus County, California. Principal in charge for this bridge replacement project which consisted of a 5 span, post-tensioned concrete box girder bridge with an overall length of 673 feet.

Bridge Replacement/Rehabilitation Studies – City of Sacramento, California. Project manager responsible for the bridge replacement/rehabilitation studies for three bridges for the City of Sacramento. Two of the bridges (West El Camino Bridge and Main Avenue Bridge) span the Natomas East Main Drain Canal. The third bridge is Bridge Road Bridge at Arcade Creek.

Cultural Center Access Road Design/Build – Sonoma County, Healdsburg, California. Principal in charge for the design documents phase of this design/build project with Granite Construction. The project included for various rural roads providing access for a new Cultural Center at Dry Creek Rancheria. Civil engineering services included roadway design, earthwork, structural design, retaining walls, and utility coordination.

Davis Road Bridge – City of Stockton, California. Project manager for the independent check and PS&E package review for this flat slab bridge widening project.

East 8th Street Reconstruction – City of Chico, California. Principal in charge for preliminary and construction documents (PS&E) and CEQA Mitigated Negative Declaration for approximately 5,000 feet of city street. The project includes bikeway/pedestrian facilities, driveways, traffic calming features, and landscape. Extensive coordination was needed with utilities and multiple agencies including a neighborhood outreach program. The project was completed on an accelerated schedule.

East Bidwell Interchange – City of Folsom, California. Conducted structural independent check of the East Bidwell Overhead crossing and supervised design of the White Rock Bridge Widening at the same interchange on State Route 50.

Elk Grove Boulevard/Elk Grove-Florin Road Intersection – City of Elk Grove, California. Principal in charge for preparing PS&E for reconstructing the intersection to provide additional capacity. Services included surveys, right of way engineering and utility coordination. The project design includes dual left-turn channelization, median modifications, signing, pavement delineation, and signal modifications.

Grant Line Road/State Route 99 Interchange Reconstruction – City of Elk Grove, California. Principal in charge for this project. This $83 million project involved replacing the existing two-lane freeway overcrossing, one of the oldest interchanges on State Route 99, with a structure designed to accommodate eight lanes. To improve traffic circulation and motorist safety on the highway and along the arterial roads, the project also included six new on/off ramps, four new signalized intersections, and realignment of local roadways to accommodate the new interchange.

Interstate 80 Soundwall Design – Caltrans, Sacramento and Placer Counties, California. Over 16,000 linear feet of concrete masonry unit soundwalls designed in accordance with Caltrans requirements.

Lambert Road Bridge and Hydraulic Gate Structure –Sacramento County, California. Design of a five-span bridge replacement with an integral hydraulic gate structure used to provide flood control to Sacramento. Hydraulic components of the new structure identically match that of the original structure.

Lozanos Road Bridge – Placer County, California. Principal in charge for the design of a single span cast-in-place, post tensioned box girder bridge which incorporated a tight horizontal curve, vertical curve, and super elevation in its in its alignment.

McCourtney Road at Coon Creek and McCourtney Road at Doty Ravine Bridges – Placer County, California. Principal in charge for the bridge replacements of the structures on McCourtney Road. The replacement structure design was for two similar 100-foot, single span post tensioned concrete box girder bridges.

North County Corridor - Claribel Road Feasibility Study – Stanislaus County, California. Project manager responsible for feasibility study to develop roadway concepts for approximately 23 miles

of six-lane roadway. The project included interchanges, railroad grade separations, bridges and extensive coordination with multiple agencies, stakeholders and utilities.

Power Inn Grade Separation – City of Sacramento, California. Project manager and bridge design engineer for two Sacramento Regional Transit light rail bridges and a separate heavy rail bridge to span over a depressed roadway. Engineering included analyzing multiple alternatives and preparation of staged construction plans.

Route 1 Auxiliary Lane/Widening – Santa Cruz County, California. Principal in charge for preparing 35% design level plans and estimate, which includes identifying design exceptions and coordinating with City staff, utility owners and other stakeholders. The project is approximately 3400 feet in length and adds a 3rd lane in each direction along Route 1 between Morrissey Boulevard and Soquel Avenue, including the replacement of the La Fonda Overcrossing structure.

Route 1 Widening/HOV PA/ED – Santa Cruz County, California. Principal in charge for the preliminary engineering leading to Project Approvals, including environmental technical studies, and preparation of the Project Report and Environmental Document for adding additional capacity to Route 1 south of Morrissey Boulevard in Santa Cruz County. The 8-mile stretch of highway includes nine interchanges, seven water way crossings, local road overcrossings, two UPRR crossings, and multiple frontage roads.

State Route 168, Segments 4 and 5 – Fresno County Transportation Authority, Fresno, California. Principal in charge for the $48 million project that extends north from the Bullard Avenue Overcrossing to east of the Temperance Avenue will be turned over to Caltrans for operation and maintenance. Construction includes 6.3 km of four and six lane freeway, one pump station, 15 bridges, box culverts, soundwalls, traffic signals, interchanges, and drainage systems. Over 1.75 million cubic meters of roadway excavation is included in the project along with major PG&E, Pacific Bell, and cable TV joint utility relocations.

Township 9 – Sacramento, California. Principal in charge of the proposed 62-acre mixed-use urban infill project with various civil engineering services.

Watt Avenue Widening – Sacramento County, California. Provided project management and design for the widening of three bridge structures on Watt Avenue with an estimated construction cost of $9 million. Structures include the widening of a 1,000-foot long bridge over the American River.

West El Camino Avenue Bridge Repairs – City of Sacramento, California. Provided project management and engineering for repairs to the existing timber bridge.

North Connector Project – Solano Transportation Authority, Solano County, California. Team member for value analysis of this roadway improvements project to reduce congestion and improve mobility for local residents north of I-80 between Highway 12 and Abernathy Road.

Interstate-80/San Pablo Dam Road Interchange Project – Contra Costa Transportation Authority, San Pablo, California. Team member for value analysis of this project involving the reconstruction of the freeway interchange to improve traffic flow and better accommodate pedestrians and bicyclists. This project was initially estimated to cost $17 million to $25 million in 2003.

Sharp Army Depot – Lathrop, California. Expert witness for a case involving the partial collapse of the roof on an existing warehouse building.

Pearl Harbor HK-50 Munitions Building – Oahu, Hawaii. Expert witness for structural lighting rod failure at munitions building. The case went to trial.

Aerojet Structures – Aerojet, Sacramento, California. Design of additions and structures required for the relocation of ten existing containment buildings at the Aerojet site.

Air National Guard Buildings – Air National Guard, Hayward, Ontario, and Costa Mesa, California. Design of additions to existing concrete masonry unit and structural steel buildings.

Autumnwood Commons Elderly Housing – Sacramento, California. Design of two-story, five building, wood framed complex for residential care and elderly housing.

Bay Area Rapid Transit(BART) Parking Structure – Bay Area Rapid Transit (BART), Pleasant Hill, California. Assisted with the design of a multi-level parking structure constructed with precast and cast-in-place concrete elements. The structure was designed to be constructed in phases and resist Seismic Zone 4 loadings.

Koll Building – Koll Company, West Sacramento, California. Structural inspections, evaluations, and repair designs for an existing tilt-up office and warehouse building owned by the Koll Company.

Lawrence Berkeley Lab Corporation Facility – Lawrence Berkeley National Laboratory, Berkeley, California. Design of a two-story industrial storage facility and office building utilizing concrete, steel framing, and concrete masonry units. Design included stringent seismic design criteria established by the Lawrence Berkeley Lab for this structure which contains hazardous materials.

Mervyn's San Francisco – Mervyn's, San Francisco, California. Seismic risk analysis and preliminary design of a three-story department store adjacent to the San Andreas Fault.

Mervyn's Antioch – Mervyn's, Antioch, California. Design seismic retrofit for the existing concrete masonry unit building and design of renovation and addition to Mervyn's Department Store.

NASA Wind Tunnel – Ames Research Center, Mountain View, California. Design of renovation for two structural steel wind tunnels.

Sacramento Regional Fire EMS (911) Communication Center – City of Sacramento, California. Principal in charge for the seismic analysis study and follow up retrofit design for an essential concrete tilt-up-wall building used by the Sacramento 911 Fire Dispatch.

San Francisco State University Residential Guest Building – California State University, San Francisco, California. Design of a seven-story residential structure located near the San Andreas Fault consisting of four structural steel braced frame levels supported by the lower cast-in-place concrete level and a basement parking garage.

San Jose State Seismic Evaluation – California State University, San Jose, California. Seismic damage inspections, evaluations, and repair designs for existing buildings at San Jose State University damaged by the October 1989 Loma Prieta earthquake.

James McConnell, AIA, LEED AP

Director of Transit Architecture

Education
Bachelor of Architecture, Magna Cum Laude, Pratt Institute, New York, 1997

B.A., Gettysburg College, Pennsylvania, 1993

Professional Registrations
Architect, Hawaii, No. 13804

Architect, New Jersey, No. 21AIO1615600

Architect, New York, No. 029252-1

Architect, North Carolina, No. 11008

LEED Accredited Professional – 2009

Awards
New York State AIA Design Merit Award

New York City Arts Commission Design Excellence Award

New York Construction News Design Award

Industry Tenure
17 Years

Professional Experience

Mr. McConnell is HDR's Director of Transportation Architecture, and has served as Senior Project Manager and/or Chief Architect on many of the firms most complex transportation projects. Most recently, Mr. McConnell was HDR's PM and Lead Designer (Chief Architect and Architect of Record) for the $1.7B Fulton Street Transit Center Project on which he led the design and coordinated the multidisciplined design team on all 5 stations and related architecture. Mr. McConnell has also been recognized for his design excellence work on transit projects, including awards from the New York AIA and New York City Arts Commission for his work on the West 8th Street Station (an elevated station). From his experience gained in rehabilitating numerous existing stations as well as on new stations designs, Mr. McConnell will apply valuable lessons learned to this project – proposing only those materials and systems that will endure in the transit station environment.

Project Experience

Fulton Street Transit Center – MTA Capital Construction New York, NY. Mr. McConnell served as the HDR Project Manager and Chief Architect (Lead Designer and Architect of Record) for all five subway stations affected by this $1.7B project, as well as numerous above the ground station entrance buildings. Mr. McConnell led a team of HDR architects, structural and civil engineers from preliminary design through construction document completion, as well as construction phase services. Construction of the new Fulton Street Transit Center is planned to (1) create a focal point for entry to the downtown rapid transit system and to provide improved connections and way-finding among six (6) major subway routes that service the area, (2) provide for a new underground corridor that will be extended into the redeveloped PATH Terminal/World Trade Center site and points west, and (3) street access to various points within the complex will be added or improved, and the existing subway stations within the complex will be rehabilitated and reconfigured to enhance interconnections. HDR's role on this project is architectural design services for all subway stations and station entrances within the complex (R/W, 4/5, A/C, J/M/Z and 2/3 lines) as well as the new below ground Dey Street Concourse. HDR also designed the new Dey Street Head House building and private property entrances through 129 Fulton Street and 135 William Street (both historic district buildings). Close coordination was required with SHPO to obtain approvals for the historic entry building work, as well as for the removal of portions of the historic 4/5 station eastern wall. New structural design work and State of Good Repair work were also performed by HDR|DF on the 4/5, A/C, J/M/Z, and 2/3 Stations. This stations portion of this project also included a substantial ADA Accessibility effort that resulted in the design of 11 ADA elevators and 2 escalators. Some of the greatest challenges faced by Mr. McConnell on this project were the coordination with a very large multidiscipline team working not only from a central project office, but also from satellite offices. Proper communication with the team was essential due to the complexities involved in this project which required the structural engineers and architects to work hand in hand to realize solutions that were both cost effective as well as being appropriate to the design intent of the project.

This project involved the concurrent design of five subway stations beginning with conceptual design, and continued through preliminary engineering to final design and construction in a dense urban environment. HDR was responsible for all subway station architecture and structural engineering and leading the coordination of the related station area engineering disciplines. This included close coordination with civil/utilities engineers; mechanical, electrical and plumbing (MEP), elevators/escalators; lighting; signage; as well as identifying all private property easements that resulted from new station entrances, several of which were through historic landmark

properties. Construction phasing, maintenance and protection of traffic (MPT), constructability, and value engineering (VE) reviews were also included in this work. HDR was also responsible for the cost/risk model used by the U.S. Federal Transit Administration (FTA) for this project. HDR's in-house rendering capabilities were essential to the MTACC for public relations/information purposes. This project is currently in construction and will be completed by 2012.

North Corridor Commuter Rail – Charlotte Area Transit System (CATS), Charlotte, NC. Chief Architect responsible for design and project management of the transportation architecture design team. This project includes the design of a brand new 11 station commuter rail line that begins in the northern suburbs and terminates in downtown Charlotte with an iconic train station terminal that sits atop an elevated freight rail ROW. The terminal station location and design is critical to the redevelopment of the adjacent downtown Charlotte community to the east of the station as well as creating a positive connection to the Johnston and Whales University Campus to the West. Particular emphasis was placed on the train station design and its ability to 'unify' downtown Charlotte with the 3rd Ward area that is currently bisected by the existing elevated grade separation. The project also included a LEED certified Vehicle Maintenance Facility, as well as the development of a Design Guidelines manual that will outline the planning and design criteria for stations along the North Corridor.

This project demonstrates HDR's experience with new system station planning, design, and preparation of new Station Planning and Design Guidelines. In addition, it conveys the ability to design 'iconic' station design in dense urban settings such as Honolulu, as well as coordinating integrated public transit facilities with universities, private development and multiple stakeholders. HDR also led multiple design charrette's with the community and local stakeholders to seek their input on the station designs.

Rehabilitation of the Neptune Avenue and West 8th Street Subway Stations – New York City Transit, Brooklyn, NY. On this $ 42M project for New York City Transit, Mr. McConnell served as the Chief Architect/Project Manager. In this capacity Mr. McConnell was responsible for the design of these two stations as well as assuming Project Management responsibilities at the midpoint of the design phase through construction completion. Demonstrative of his hands-on nature, Mr. McConnell personally prepared the drawings, details, and specifications for this award winning façade. Located on the Culver and Coney Island Lines, these elevated subway stations required extensive rehabilitation to both the mezzanine and platform levels. Additional rehabilitation and replacement of exterior and interior stairs, ramps, canopies, windscreens, electrical facilities, communications facilities, lighting, plumbing, and safety equipment were also performed. The windscreen design for the south side of station's facade was developed in collaboration with artist Vito Acconci in conjunction with the MTA Arts for Transit Program. This project has won a New York City Arts Commission award for Excellence in Design, a NY State AIA Design Merit Award, and a New York Construction News Design Excellence Award. Community Board Approval was obtained by working closely with the MTA Government and Community Relations Department and Local Coney Island Officials through public 'town hall' type meetings.

This project demonstrates HDR's ability to design award winning elevated station designs and is an example of successful stakeholder involvement. It also illustrates the ability to collaborate successfully with artists in the context of providing artwork at transit stations.

New Valley Stream Station and Platform and Site Rehabilitation, Long Island Rail Road – New York, NY, Valley Stream, NY. Project Manager and Chief Architect. This project consists of three main components: station house replacement, platform area rehabilitation work, and site-wide ADA compliance upgrades. The HDR team designed a new modern station house using Sustainable Design strategies and materials, and included a primary material palette of brick, glass and aluminum, ecoresin canopies, and cast stone. The areas around the new station house were upgraded to resolve the current drainage problems as well. The platform level waiting rooms and stair/escalator enclosures were completely renovated to include new windows, ceilings, lighting, flooring, and furniture. Artwork was included in coordination with MTA Arts for Transit and included mosaic wall tile installations throughout the station, and artwork was incorporated into

the terrazzo floors of the station lobby – where the terrazzo itself was a blend of recycled colored glass, in keeping with a sustainable approach to the station design.

The design of the station façade was very unique in that the State Senator who is the major proponent for this project requested that the HDR Team develop 3 alternative designs for the station to allow the residents of Valley Stream to select their favorite by public vote. Renderings of the 3 options were placed at the Village Hall and on the Senator's website. The final design that was constructed was the design selected by the Village resident's majority vote.

This project demonstrates how well HDR's design team works with stakeholders to develop station designs that meet the needs of the community that they will serve. HDR was also routinely present at last minute press conferences with the Senator to brief the community on the status of the project. This also demonstrates our Sustainable approach to station design and understanding of the importance of carefully selecting materials that are sustainable, attractive, durable, and maintainable.