Underground Construction Association
A Division of SME

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12999 E. Adam Aircraft Circle
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February 7, 2025

Re: Candidate for Vice-President, ITA

Dear ITA Executive Director and ITA Secretariat:

On behalf of the Underground Construction Association of SME (UCA), the United States' representative organization as an ITA Member Nation, we are pleased to present Ms. Sanja Zlatanic, PE (professional engineer) as a candidate for vice-president to the ITA-AITES Executive Council for the next triennium.

Ms. Zlatanic is a distinguished leader in the global tunneling industry, with an extensive portfolio of projects spanning Türkiye, Iraq, Canada, and numerous other countries. Her tenure as Secretary General for the Board of Directors of the Associated Research Centers for Urban Underground Space provided her with a comprehensive understanding of global industry dynamics and the key challenges facing the U.S. tunneling community. Currently serving on the ITA Executive Council, Ms. Zlatanic has demonstrated exceptional leadership, spearheading critical initiatives to enhance ITA's mission, governance, and outreach. Her contributions include:

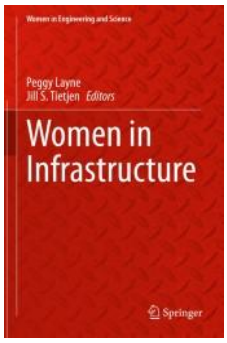
- Leading efforts to implement changes to ITA Bylaws to expand membership categories, including individual, owner, and regional memberships, broadening ITA's global outreach.
- Advocating for free access to ITA digital media and publications, increasing knowledge dissemination.
- Contributing to the strategic assessment of ITA's financial structure to ensure sustainable growth through carefully managed membership fee adjustments.
- Assisting in systematic risk assessments to safeguard ITA's mission under various potential challenges.
- Playing a key role in defining and advancing ITA's new 'OneITA' mission, aimed at strengthening the organization's global presence and impact through enhanced outreach, education, workshops, and training initiatives.
- Driving innovations and advancements in the tunneling industry to improve quality of life and safety, particularly in addressing global climate change, urbanization, and infrastructure resilience.
- Establishing qualitative and quantitative criteria for ITA working groups and committees, ensuring greater engagement and measurable industry impact.
- Promoting initiatives to expand the participation of young professionals in the tunneling sector, both globally and within the U.S.

Over the past decades, Ms. Zlatanic has been responsible for managing all phases of major multi-billion-dollar projects, including extensive multidisciplinary joint venture staff, from feasibility and conceptual engineering through final design and construction. She received a Technical Excellence Award and had been recognized as her parent company's (HNTB's) Fellow, for extraordinary career-long accomplishments, practicing technical excellence and championing innovative approaches to solving underground engineering issues, especially in

relation to minimizing the impacts of tunneling on densely populated urban environments, communities and businesses.

Since 2016, Ms. Zlatanic has been chair of HNTB's National Tunnel Practice and has led and mentored dozens of tunnel consultants bringing value to multi-billion-dollar tunneling projects, including the independent design verification of the Istanbul Strait Road Crossing Tunnel project, in Turkey, overseeing design and construction issues for the SR-99 Alaskan Way Tunnel project, in Seattle, Washington, and developing a novel large-diameter single bore tunnel concept for transit to be built in the U.S. for the first time, among others. Her projects have won many industry awards.

Please find attached more detailed information on Ms. Zlatanic and her work within the tunneling community. Also, Ms. Zlatanic' recent engagement to author a chapter in the infrastructure volume of the prestigious Women in Science and Engineering series by Springer Publications entitled "Women in Infrastructure," is notable. Ms. Zlatanic emphasized the importance of tunneling and underground engineering toward development of our cities and regions and drew attention to great lessons learned that have inspired generations of engineers. The infrastructure volume follows the American Society of Civil Engineers (ASCE) Infrastructure Report Card for its framework and was published in February 2022; it is available to the public (see below).



Ms. Zlatanic has the full support of the UCA of SME Executive Committee due to her successful tenure on the ITA Executive Council, her extensive and worldwide knowledge of the tunneling industry, collaborative approach, and her ongoing energy and dedication to improving and promoting essential ITA programs. Again, it is my pleasure to put forth and recommend Sanja Zlatanic as a candidate to serve as a vice-president of the ITA-AITES Executive Council. I hope I can count on your support.

Sincerely,

Erika P. Moonin

Erika Moonin
UCA of SME Chair

Nomination for the ITA Vice President

Sanja Zlatanic, P.E.

Fellow, Chair – National Tunnel Practice
HNTB Corporation

Biography and Contributions:
Sanja Zlatanic, P.E., graduated from the School of Civil Engineering at the University of Belgrade, in former Yugoslavia, in 1988, at the top of her class. Her academic standing led to a job offer prior to graduation at one of the country's most prominent engineering firms, Energoprojekt, which went on to endure the tests of the country's political challenges and economic hardships during the 90's and still thrives today.

Sanja began her career at Energoprojekt working on international projects and continued in this domain following a move to the United States with her husband, in 1991, shortly before the start of the civil war in Yugoslavia. Within a few short years the bloody regional conflict led to the complete dismantling of the country and the creation of new states. With her parents trapped in the region until the end of the war, Zlatanic raised her two sons in New York, and pursued her carrier with great resolve. Her enthusiasm for engineering, especially complex underground structures, overlapped with her appreciation of being a part of the 'American dream', where personal growth is achieved through hard work, persistence, continuous self-improvement, as well as love, empathy and the care of others.

In New York, Sanja joined a well-known tunneling company where she exercised all the 'tools of the trade' in terms of tunnel design, construction and a sophisticated approach to risk-based decision making; she shared these experiences with many prominent national and international experts engaged on the largest tunnel projects in the United States, primarily for transportation.

Over the past 30 years, Sanja has been responsible for managing all phases of major multi-billion-dollar projects, including extensive multi-disciplinary joint venture staff, from feasibility and conceptual engineering through final design and construction. Her superb results in project management and multi-disciplinary coordination and integration of complex underground structures and tunnels has been witnessed and appreciated by clients and major transit agencies nationally and internationally. Her ability to bring forward state-of-the-art innovative solutions through collaboration with top industry experts had brought value to many mega-transit programs.

As an active member of various tunneling and underground societies, she is well recognized in the profession and has published numerous articles, chaired conference sessions and made numerous presentations on the design of construction of tunnels and underground facilities at national and international tunneling conferences. She received a Technical Excellence Award and had been recognized as a Fellow, for extraordinary carrier-long accomplishments, practicing technical excellence and championing innovative approaches to solving underground engineering issues, especially in relation to minimizing the impacts of tunneling beneath densely populated urban environments, communities and businesses. She is an elected Board Member and Secretary General of ACUUS (Associated Research Centers for Urban Underground Space), an international, non-

governmental organization dedicated to partnerships among experts who research, plan, design, construct and decide upon the best use of urban underground space.

Since 2016, Sanja has been Chair of HNTB's National Tunnel Practice and has led and mentored dozens of tunnel consultants bringing value to multi-billion-dollar tunnel projects, including the independent design verification of the Istanbul Strait Road Crossing Tunnel project, in Turkey, overseeing design and construction issues for the SR-99 Alaskan Way Tunnel project, in Seattle, WA, and developing a novel large-diameter single bore tunnel option for transit in the United States, among others. Her projects have won many industry awards.

Sanja firmly believes in the important role women perform in the tunnel industry; the teams who benefit from diverse participation, especially when solving challenges and exploring innovation, are generally more productive. A few decades ago, when Sanja first chose her career, there were just a handful of female professionals in this realm; today, many young women are interested in the field of tunneling and underground engineering and they generally find the industry supportive and rewarding. Having never met a woman who expressed a regret about being in tunneling industry, Sanja trusts it is a 'happy' career choice as well.

Tunneling and underground projects are among the riskiest engineering practice areas. Sanja trusts solid engineering judgement and practical solutions that always have safety as a primary concern. Throughout the years, she has learned the only way to successfully conquer great challenges is to rely on team contribution as well as having the courage to pursue one's own vision and convictions. Often it is not easy; however, in practicing the perseverance, respect and camaraderie that is typical of the tunneling industry, it is possible. Courage is also a big component – one should speak their mind, especially when it comes to ideas or solutions that can move a project forward. The tunneling and mining industry is a very warm and gratifying environment and a very conducive atmosphere for women engineers to thrive. This originates from a long-developed culture of caring – the lives of miners are often in the hands of their teammates. This culture has transferred into the consulting industry as well and a feeling of camaraderie and mutual respect is ever present. "Occasionally, early in my career, I would find myself needing to work harder to 'break the ice' in terms of obtaining a team's trust or having to prove a point – in retrospect, I am very grateful for those instances, as they made me a fast learner, gave me courage to think 'outside the box' and propelled me to develop and put forward innovative solutions," Sanja notes.

Sanja is a distinguished leader in the global tunneling industry, with an extensive portfolio of international and U. S. projects. Her tenure as Secretary General for the Board of Directors of the Associated Research Centers for Urban Underground Space provided her with a comprehensive understanding of global industry dynamics and the key challenges facing the U.S. tunneling community. Currently serving on the ITA Executive Council, Ms. Zlatanic has demonstrated exceptional leadership, spearheading critical initiatives to enhance ITA's mission, governance, and outreach. Her contributions include: -Leading efforts to implement changes to ITA Bylaws to expand membership categories, including individual, owner, and regional memberships, broadening ITAôs global outreach. -Advocating for free access to ITA digital media and publications, increasing knowledge dissemination. -Contributing to the strategic assessment of ITAôs financial structure to ensure sustainable growth through carefully managed membership fee adjustments. -Assisting in systematic risk assessments to safeguard ITAôs mission under various potential challenges. -Playing a key role in defining and advancing ITAôs new ó0neITAômission, aimed at strengthening the organizationôs global presence and impact through enhanced outreach, education, workshops, and training initiatives. -Driving innovations and advancements in the tunneling industry to improve quality of life and safety, particularly in addressing global climate change, urbanization, and infrastructure resilience. -Establishing quantitative criteria for ITA working groups and committees, ensuring greater engagement and measurable industry impact. -Promoting initiatives to expand the participation of young professionals in the tunneling sector, both globally and within the U.S.

Ms. Zlatanicôrecent engagement to author a chapter in the infrastructure volume of the prestigious Women in Science and Engineering series by Springer Publications entitled ñWomen in Infrastructure,ò is notable. Ms. Zlatanic emphasized the importance of tunneling and underground engineering toward development of our cities and regions and drew attention to great lessons learned that have inspired generations of engineers. The infrastructure volume follows the American Society of Civil Engineers (ASCE) Infrastructure Report Card for its framework and was published in February 2022; it is available to the public

SANJA ZLATANIC, PE
National Practice Leader

Sanja brings over 35 years of national and international experience in engineering and design management of multi-billion-dollar tunnel and underground projects, primarily for transportation and infrastructure, from feasibility studies through final design and construction. Her ability to bring forward state-of-the-art innovative solutions to minimize environmental and urban impacts brings much value to agencies and communities. Sanja won several Technical Excellence awards throughout her career. Since September 2022, Sanja has been UCA (Underground Construction Association) and U.S. tunnel industry representative in Executive Council of ITA (International Tunneling Association) and brought values to the ITA through leading the task force toward expanding the membership globally to include owners, regional, and individual membership from all countries around the world with thriving and/or developing tunneling and underground space industries, on equal and inclusive basis.

As an active member of various tunneling and underground societies, she is recognized in her profession and has published numerous articles, chaired conferences, and made presentations on the design of construction of tunnels and underground facilities at national and international tunneling venues. Sanja's team is well-known for bringing innovative ground-breaking solutions to the industry and utilizing new yet proven technologies toward improving underground solutions, especially in the realm of reducing environmental and stakeholder impacts. She is an elected board member and secretary general of Associated Research Centers for Urban Underground Space (ACUUS), an international, non-governmental organization dedicated to partnerships among experts who research, plan, design, construct and decide on the best use of urban underground space. Additionally, Sanja is an active member of the prestigious Moles organization and Chair of the George Fox Conference.

Sanja's superb results in project management and multidisciplinary coordination and integration of complex underground structures and tunnels have been highly recognized by clients nationally and internationally, leading her to execute very complex tasks efficiently and collaboratively. Her client from Trans Hudson Express Tunnel project noted: *'The PM was very proficient in all required ratable skills; closely supervised daily activities of a large staff & kept staff up to date on work; prepared highly professional design documents & deliverables; communicated in a professional and articulate manner; cooperated well with owner representatives and was always readily available when needed; notified and obtained owner approvals on work and staff changes; and was outstanding in keeping the client completely informed and up to date.'*

SANJA ZLATANIC, PE

HNTB Corporation

Education

(MS Equivalent) Graduate Structural Engineer, 1988, University of Belgrade, (former) Yugoslavia

Executive Education for Women, 2005, Smith College

Professional Registrations

Professional Engineer:

NY/1997, #074281

Professional Affiliations

The Moles

American Society of Civil Engineers

Executive Council of ITA-AITES (International Tunneling Association)

Underground Construction Association (UCA), a division of Society for Mining, Metallurgy, and Exploration (SME)

UCA, Women in Tunneling

UCA, George Fox Conference, Program Committee Chair

Deep Foundation Institute (DFI) Tunneling and Underground Committee – Advisory Group

Board Member, Secretary General, Associated Research Centers for Urban Underground Space (ACUUS)

Hire Date with HNTB

October 2011

Years of Experience with Other Firms

23

Relevant project experience

Los Angeles Metro, Sepulveda Transit Corridor, Los Angeles, CA
Metro Sepulveda Transit AA/ED/

Chief tunnel engineer responsible for engineering tunnels and complex underground structures, including stations for 12-miles, $14 billion Los Angeles Metro (LA Metro) Sepulveda Pass underground transit corridor, implementing LA Metro standards toward most practical and least environmentally impactful alternative route for the future longest transit tunnel in the U.S. through Santa Monica Mountains, extending through San Fernando Valley and Westside Los Angeles. The project involves advanced conceptual engineering of an underground heavy rail transit alternative to support the environmental study. The underground corridor will connect San Fernando Valley and Los Angeles Westside and include seven underground stations. In addition to urban tunneling and underground station construction, exceptional challenges for the project include tunneling through the active Santa Monica fault zone and Santa Monica Mountains with the potential for extremely high groundwater pressure.

Start/End dates: May 2017/October 2019

Construction cost: $14 billion

Sound Transit, The West Seattle and Ballard Link Extensions (WSBLE), Seattle, WA
West Seattle-Ballard Link Ext

Technical advisor to joint venture for Sound Transit's four-mile tunnel component of $11.7 billion, 11.8-mile WSBLE project with six underground stations through downtown Seattle, additional underground stations in West Seattle and Ballard, and Salmon Bay tunnel crossing, toward establishing the project route and configuration, including tunnel/station locations and types, through environmental assessment and related engineering to consider third-party stakeholder inputs where options are evaluated for their operational, passenger circulation and experience, maintenance, and safety features, including fire life safety and code compliance.

The West Seattle and Ballard Link Extensions will provide fast, reliable light rail connections to dense residential and job centers and a new downtown Seattle light rail tunnel will provide capacity for the entire regional system to operate efficiently. Two separate Link extensions are part of the regional transit system expansion approved by voters in November 2016—West Seattle to downtown and Ballard to downtown.

Start/End dates: August 2016/ongoing

Construction cost: $11.7 billion

Santa Clara Valley Transportation Authority (VTA), Single Bore Tunnel Technical Study and Bay Area Rapid Transit (BART) Silicon Valley, Phase II – Program Management Services, San Jose, CA
BART to SJ PH II - PM Full Con

Technical joint venture engineering lead for the Single Bore Tunnel Technical Study, and engineering manager for technical criteria and documents development as part of the program management team, featuring large diameter tunnel housing 5.1 miles of double-track alignment and three underground stations through downtown San Jose, CA. Excited about the potential of this innovative scheme to minimize construction impacts to residences, businesses and public within dense urban area of the City of San Jose, Sanja had diligently worked with a team of national and international experts to assess feasibility of the concept for VTA on its application on BART extension program to Santa Clara. Representing a first-time application of single-bore tunnel in the United States, Sanja lead the team and succeeded capitalizing on tunnel boring machine technology advances that gained momentum for transit and rail applications toward minimizing impacts of underground construction within dense urban environments, controlling construction and environmental risks, and improving certainties to construction schedules and capital costs for complex mega transit projects.

As the project materialized through first progressive Design Build underground/tunnel procurement in the U.S., Sanja had remained as technical advisor for the team, overseeing the industry outreach, application of alternative technical concepts and final design development by design build contractor's team that bring more certainty to the project schedule and cost and offer solutions to better manage construction risks.

Start/End dates: May 2015/August 2028

Construction cost: $12.3 billion

National Railroad Passenger Corporation (Amtrak), Baltimore & Potomac (B&P) Tunnel Replacement, Baltimore, MD
AMTRAK BALTIMORE TNL PM CONSLT

Peer reviewer, HNTB Program Management team, for preliminary engineering studies and environmental analyses of the B&P Tunnel to improve rail service, reliability and address a longstanding bottleneck along Amtrak's busy Northeast Corridor (NEC). The new B&P Tunnel provides a new route through Baltimore, connecting the existing Baltimore Pennsylvania Station with points south, rebuilding a portion of Amtrak's Northeast Corridor under West Baltimore on a new alignment between Baltimore Pennsylvania Station and milepost 99 is warranted to ensure the long-term serviceability of the NEC and to support strategic growth of intercity and local commuter rail traffic.

Start/End dates: February 2012/August 2017

Construction cost: $4.5 billion

Washington State Department of Transportation, SR-99 Alaskan Way Viaduct Replacement, Seattle WA
C/C/A-STP-SR99 Tunnel Project
On WSDOT SR-99 Alaskan Way Tunnel $3.3 billion 2.1-mile tunnel project, the largest 57.5-foot diameter single bore project in the world beneath downtown Seattle, Sanja was a member of expert review panel evaluating bored tunnel solution that replaced the Alaskan Way Viaduct along the central Seattle waterfront bored beneath city streets, under 156 buildings, numerous utilities, and other city infrastructure. There, Sanja lead technical oversight for tunnel liner, interior structures and settlement mitigation measures design including ground improvements to mitigate risks.

The project also includes control buildings, fire and life safety, ventilation buildings, and mechanical and electrical components.

Start/End dates: May 2013/January 2014

Construction cost: $3.3 billion

Republic of Turkey Ministry of Transport, Istanbul Strait Road Crossing (Eurasia) Tunnel, Istanbul, Turkey
MARMARAY TUNNEL PFP-ISTANBUL
Project manager and independent design verifier for category three structures, systems and facilities for this $1.35 billion Istanbul Strait Road Tube Crossing project of 14.5 kilometers in length that includes 5.4 kilometers of road tunnels and 3.4 kilometers Bosporus Strait Crossing double-deck bored highway tunnel 13.2 meters (43.3 feet) in diameter (sixth largest tunnel in the world), and two kilometers Asian and European side tunnel approaches (roadways, toll plazas, ventilation and system buildings and facilities). On Eurasia tunnel, Sanja led the team of experts that provided independent design verification of most complex project civil and system elements including bored and SEM tunnel permanent and temporary supports, and ventilation and fire life safety, for P3 Concessionaire and brought betterments to project management of risks, constructability, cost, and schedule, contributing project early completion. The tunnel passes through extreme geological, hydrogeological, and seismic conditions; is subject to eleven bars of water pressure and located in a close proximity of Marmaray fault. As large bore 'double-decker,' the tunnel accommodates a two-over-two-lane road for passenger vehicles and minibuses, including the stopping lane.

Start/End dates: February 2012/May 2016

Construction cost: 1.1 billion Euro (then $1.35 billion)

San Francisco Municipal Transportation Agency, T Third LRT/Central Subway, Phase 3, San Francisco, CA
SFMTA - Engineering
Leader for SFMTA feasibility and constructability study to optimize existing Muni LRT transit service, assess potential for future rail transit expansion to serve northern San Francisco neighborhoods, including North Beach and Fishermen's Wharf, and analyze constructability issues related to the study alignments and feasibility of potential transit alternatives. The constructability assessment is to be used by SFMTA as an input to a broader analysis of varying expansion concepts to the existing Muni transportation corridor, primarily to the north and north-east of San Francisco, CA.

Start/End dates: May 2014/September 2015

Construction cost: $1.15 billion

MTA - New York City Transit, Structural Assessment of Greenpoint, Cranberry and Rutgers Tubes, Manhattan and Brooklyn, NY
NYCT FEDERAL IDIQ DESIGN SVCS - NYCT IDIQ-Struct Assess 3Tubes
Technical expert for the structural assessment and rehabilitation of three subway tunnels under the East River in New York which were flooded during Superstorm Sandy in October 2012. The tunnels are: Greenpoint, Rutgers, and Cranberry connecting Manhattan, Queens, and Brooklyn. The tunnels range in length with the longest approximately 7,000 feet long. The tunnels are constructed of cast iron liner with unreinforced cast in pace concrete liner. The intent of the study is to identify visible and potentially latent defects and prepare repair measures. The investigation consisted of using state of the art three-channel scanner providing high-resolution photogrammetric, laser and infrared single-pass survey.

Start/End dates: October 2013/October 2014

Construction cost: $300 million

Los Angeles County Metropolitan Transportation Authority, Crenshaw/LAX Corridor Design Build, Los Angeles, CA
C/C/A-WALSH-Crenshaw LRT D-B
Technical expert/senior technical reviewer for design of underground segment of this $2.1 billion design-build (DB) program for HNTB as a lead designer and engineer of record for DB team. Underground structures/tunnels technical lead during the DB project pursuit leading into a best value DB proposal (best technical and most economical DB proposal). The project includes three miles of underground line structures and three underground stations being constructed by the cut-and-cover method. The underground guideway includes two 22-foot diameter tunnels constructed with EPB TBM connecting three underground stations.

Start/End dates: November 2011/November 2019

Construction cost: $2.1 billion

Los Angeles County Metropolitan Transportation Authority, Regional Connector LRT Line, Los Angeles, CA

Engineering lead for design-build contractor during the tender phase; instrumental in identification of more than $80 million of potential savings through alternative technical concepts in compliance to LA Metro design criteria. The project includes 1.9-mile underground light-rail system, connecting the Metro Gold Line to the 7th Street/Metro Center Station and providing direct connection between Azusa and Long Beach and between East Los Angeles and Santa Monica; three new stations accommodating ventilation/service facilities-- 1st Street/Central Av, 2nd Street/Broadway, and 2nd Place/Hope; running tunnel, NATM, cut and cover and U-structures.

Start/End dates: 2013/2014

Construction cost: $1.4 billion

California Department of Transportation, Presidio Parkway Tunnel, Doyle Drive Replacement, San Francisco, CA

C/C/A-FlatIron Presidio Pkwy

Member of an expert peer review panel for this high-profile $1 billion P3 tunnel project to completely reconstruct approximately two miles of Doyle Drive, including 10 bridges; three cut-and-cover tunnel sections constructed below the high-water level; 11 retaining walls; and an at-grade section. This project also includes reconstructing the Park Presidio and Presidio Access interchanges and improving local street circulation in the area. HNTB is the lead designer and engineer of record responsible for all roadways, structure, electrical, mechanical and landscape components of the project. Sanja provided oversight and technical reviews of the structural systems and the fire-life safety aspects, including the evaluation of the impact of design fire on the primary structural and system elements.

Start/End dates: February 2012/March 2016

Construction cost: $1 billion

Broward County, Fort Lauderdale Hollywood International A.P. Runway Expansion, Fort Lauderdale, FL

C/C/A-TP Ft.Laud-HollywoodIntl

Technical lead for the technical assessment of the design for the fire impact evaluation on the tunnel main structural components, including system elements. This design-build project provides airport runway expansion over the top of a highway and railway with a post-tensioned bulb-tee composite structure as the roof of the tunnel.

Start/End dates: July 2013/March 2014

Construction cost: $300 million

Project experience prior to joining HNTB

NJ TRANSIT and Port Authority of New York and New Jersey, Trans-Hudson Express, New York and New Jersey

Chief engineer for underground structures responsible for final structural designs and interdisciplinary design integration for all underground structures and facilities (running tunnels, caverns, ancillary and utility tunnels, and shafts), including development and implementation of design strategies, criteria and mitigation methods for special loading conditions, fire, blast and structural considerations, to prevent progressive collapse.

Sanja also served as contract manager for two largest multi-million-dollar Trans-Hudson project contracts involving the excavation and final structures of large underground openings forming the final terminal station configuration to provide passenger connection to Penn Station. She helped drive the implementation of major risk mitigation measures to avoid impacts to existing subsurface structures. She devised the Parallel Northeast Corridor (NEC) Concept to avoid double crossing beneath the NEC that would pose the risks to existing operations. Working with diverse group of consultants, Sanja directed production of high-quality design documents.

The project included three major tunnel segments to be delivered under design-build contracts: a tunnel in Manhattan running from the Hudson River east to Sixth Avenue; a tunnel under the Palisades to the existing Northeast Corridor in New Jersey; and two single-track tunnels under the Hudson River. The project also involved construction of a multi-level, 100-foot (30 meter) span terminal cavern station in rock. This cavern, which includes multiple ancillary tunnels and shafts, multiple entrances, and ventilation plants, was situated under 34th Street in Manhattan and connected to New York Penn Station; it provided direct connections to Port Authority Trans-Hudson (PATH) trains and to 14 subway lines operated at 6th, 7th, and 8th Avenues by the MTA — New York City Transit.

Start/End dates: 2006/2010

Construction cost: $11.3 billion (project cancelled by NJ Governor)

San Francisco Municipal Transportation Agency, Central Subway, Third Street Light Rail, Phase II, San Francisco, CA

Technical lead for the peer review and value engineering team for underground stations of San Francisco's Central Subway project. Sanja provided contribution on improving constructability aspects and minimizing construction risks for three underground stations, which included the Moscone Center Station, Union Square-Market Street Station, and Chinatown Station. Sanja contributed innovative constructability solutions related to slurry wall and secant piles excavation support systems. As part

of a tri-venture, this project consists of 1.7 miles of twin tunnels, 20-feet in diameter, and three underground stations at a cost of $1.58 billion.

Start/End dates: 2010/2011

Construction cost: $1.58 billion

MTA - New York City Transit, No. 7 Subway Line Extension, New York, NY
Design manager for the $2.1 billion extension of the No. 7 line from its current terminus at Times Square to a new station at 34th Street and 11th Avenue. Throughout the final design, she led tasks encompassing design optimization through improvement of constructability, development of a construction packaging approach, and mitigation of construction risks while mitigating impacts to third parties. Also, Sanja was responsible for the development of project-specific design criteria in conformance to industry-wide accepted design standards and codes for final structural designs of all mined structures, including multidisciplinary coordination and design integration.

Start/End dates: 2004/2006

Construction cost: $2 billion

MTA - Long Island Railroad, East Side Access - Grand Central Madison, New York, NY
Design manager who led the design development of the Manhattan segment deep station alternative and was responsible for the delivery of the final documents that resulted in the selection of the deep station scheme for this $7.6 billion project. The final documents included the construction methodology approach and comparative analysis of construction risk aspects. When complete in 2020, this project will enable the LIRR to provide direct service to the east side of Manhattan via a new eight-track terminal being constructed at Grand Central Terminal. The contract also involves the closure of the Manhattan construction access shaft in the borough of Queens and the rehabilitation of the existing double-decked, four-quadrant 63rd Street Tunnel.

Start/End dates: 1999/2005

Construction cost: $10.8 billion

San Francisco Municipal Transportation Agency, Project – Underground Stations, San Francisco, CA
Peer review and value engineering team member for underground stations of San Francisco's Central Subway project as part of a tri-venture on this project that consists of 1.8 miles of twin tunnels 20 feet in diameter and three underground stations at a cost of $1.58 billion. Moscone Center Station will be constructed using cut-and-cover method with top-down construction technique. Union Square-Market Street Station is the deepest

station at about 100 feet from the surface. It will be constructed using cut-and-cover with top-down approach using inclined secant or tangent piles. Chinatown Station will be constructed using sequential excavation method or NATM in mixed-face ground conditions with a shallow cover and adjacent to sensitive utilities and buildings. Sanja contributed innovative constructability solutions related to slurry wall and secant piles excavation support systems.

Start/End dates: 2010/2011

Construction cost: $1.58 billion

Toronto Transit Commission, Transit Expansion LRT Program, Toronto, Canada

Sanja provided consultancy and technical support for establishing technical and engineering standards for $8.2 billion Transit Expansion LRT Program for Toronto Transit Commission, including criteria for tunnel precast concrete segmental liner design. She provided independent verification of tunnel liner performance during major fire event in the tunnel for 10.5-kilometer-long Eglington Crosstown Light Rail Transit twin bored tunnels, constructed by EPB TBM with 5.75-meter clear inside diameter, and crossing beneath densely populated urban areas where loss of liner would cause loss of ground and large surface settlement impacts.

Start/End dates: 2010/2011

NJ TRANSIT, Hudson-Bergen Light-Rail Transit System, Weehawken Tunnel and Bergen line Avenue Station, Hudson and Bergen Counties, NJ

Project engineer responsible for all aspects of project completion — from condition assessment of the existing tunnel structure to the development of the final design documents and cost estimating for this $200 million project. As part of her responsibilities, she developed and implemented the design methodology used for consideration of design fire impacts to the tunnel and cavern final liners. The project includes the development of the 20.6-mile light-rail transit system served by 32 stations and five regional park-and-ride lots. In addition to providing preliminary engineering and architectural services for all facilities and systems, the project also included final design and contract document preparation of the Weehawken Tunnel and Bergenline Avenue Station. The station is located within the tunnel, which was built in the late 1800s specifically for freight traffic and was used for that purpose until 2002. She was responsible for enlarging the 4,200-foot-long tunnel into a modern double-track light-rail tunnel, including the design of a new underground station cavern, elevation/ventilation shaft, two ventilation plants, and other multimodal service facilities.

Start/End dates: 1995/1999

Construction Completion Date: 2004

Construction cost: $400 million

National Railroad Tunnel Corporation (Amtrak), East River Tunnels, Rehabilitation of First Avenue and Long Island City Ventilation Shafts, New York, NY

Deputy project manager and project engineer for the rehabilitation of three ventilation shafts at the First Avenue and Long Island City segments of Amtrak's East River Tunnels. The project's objective was to improve railroad operation and passenger safety by providing a safe means of egress from the tunnels to the street and by controlling smoke and heat in the tunnels to provide a clean environment for passengers in the path of egress. In addition to developing design alternatives, establishing the project budget, and maintaining schedule control, she was responsible for liaison with Amtrak, project stakeholders, and federal, state and city agencies during the project's approval phase and coordination of project multidisciplinary staff during the final design process.

Start/End dates: 1994/1995

Construction Completion Date: 2004

MTA - Bridges and Tunnels (TBTA), Brooklyn Battery Tunnel Wall and Ceiling Rehabilitation, New York, NY

Project engineer during the project's construction stage, this project for MTA Bridges and Tunnels comprised tunnel ceiling rehabilitation, liner repair for damage caused by water leakage and roadway lighting improvements for the 9,717-foot-long (3,000-meter-long) Brooklyn Battery Tunnel — the second longest underwater crossing in the U.S. — connecting lower Manhattan and Brooklyn. She provided construction support services, reviewed, and approved the contractor's alternative designs; developed preferred alternatives; evaluated the contractor's work; and coordinated communication between PB, the MTA and the contractor. The project won the Gold Award in Engineering Excellence from the New York Association of Consulting Engineers (NYACE) in the Transportation Studies and Mega Projects category.

Start/End dates: 1993/1995

Construction Completion Date: 1995

MTA - New York City Transit, 63rd Street Tunnel Connection, New York, NY

Lead designer responsible for several major structures for this complex project, including the 29th Street and 39th Avenue ventilation structures involving extensive underground tunnel connections, the multi-track tunnel structures, slurry wall designs, and modifications to the existing Court

Square Station structure. This is a $700 million transit tunnel extension that included a 2,000-foot-long (600-meter-long), two-track connecting tunnel between and under two operating subway lines, two new above-ground ventilation buildings, modifications to six Queens transit stations, and substantial utility relocation. The project provided additional subway service between Manhattan and Queens via the existing 63rd Street Tunnel beneath the East River.

Start/End dates: 1991/1994

Construction Completion Date: 1995

Construction cost: $160 million

MTA - New York City Transit, Indefinite Quantity Contract CM-995, New York, NY

Project manager responsible for project performance; scope, schedule, and budget control; coordination of multi-disciplinary activities on over 30 parallel and diversified project tasks; and coordination with the client, city and state agencies, and local community boards.

Start/End dates: 1994/1996

Construction Completion Date: 1996

Publications/Conferences

"Structural Design Methodology for Large-Span Caverns in Rock," NAT Conference, Portland, Oregon, 2010 (session chair).

"Innovative Use of Concrete and Shotcrete," New York City Concrete Industry Board Honor Presentation, 2009.

"Quantitative Assessment of Structural Fire Endurance of Concrete and Shotcrete Tunnel Liners," presented at ITA Conference 2005, Istanbul, Turkey.

"Ground Borne Vibration on the East Side Access Project Manhattan Segment: Issues and "Assessment of Fire-Induced Damage on Concrete and Shotcrete Tunnel Liners," presented at the Transportation Research Board Annual Meeting, Washington D.C., January 2005

"Structural Fire Performance of Concrete and Shotcrete Tunnel Liners," Journal of Structural Engineering, 2004.

"Connecting a Commuter Railroad to a Historic Terminal in Manhattan," ITA 2003, Prague, Czech Republic.

"Manhattan Segment of East Side Access Project: Design Evolution," Proceedings of the Rapid Excavation and Tunneling Conference, San Diego, California, 2001.

"The Grand Central Connection Project in Manhattan," Proceedings of the 16th Congress of the IABSE, Lucerne, Switzerland, September 2000.

"Minimizing Risk in Underground Construction Using DBOM Approach: A Case History," International Congress on Underground Construction in Modern Infrastructure, Stockholm, Sweden, 1998.

"Modern Use of an Old Tunnel to Meet Public Needs," International Congress on Underground Construction in Modern Infrastructure, Stockholm, Sweden, 1998.

"Design Considerations of a Turnkey Contract for an Underground LRT System," World Tunneling Congress '98 -Tunnels and Metropolises, Sao Paulo, Brazil, 1998.

Awards and Recognition

Engineering News-Record (ENR) - Global Best Project, Bridge/Tunnel, Istanbul Strait Road Tube Crossing, 2016

International Tunneling Association (ITA) - Tunneling Project of the Year, 2015

Gold Award for Engineering Excellence, NY American Council of Engineering Companies, East River Ventilation Shafts Project, 2011

Outstanding Underground Project, American Shotcrete Association, Weehawken Tunnel and Bergenline Avenue Station, 2006

Grand Conceptor Award, ACEC, 63rd Street Connection Project, 2001

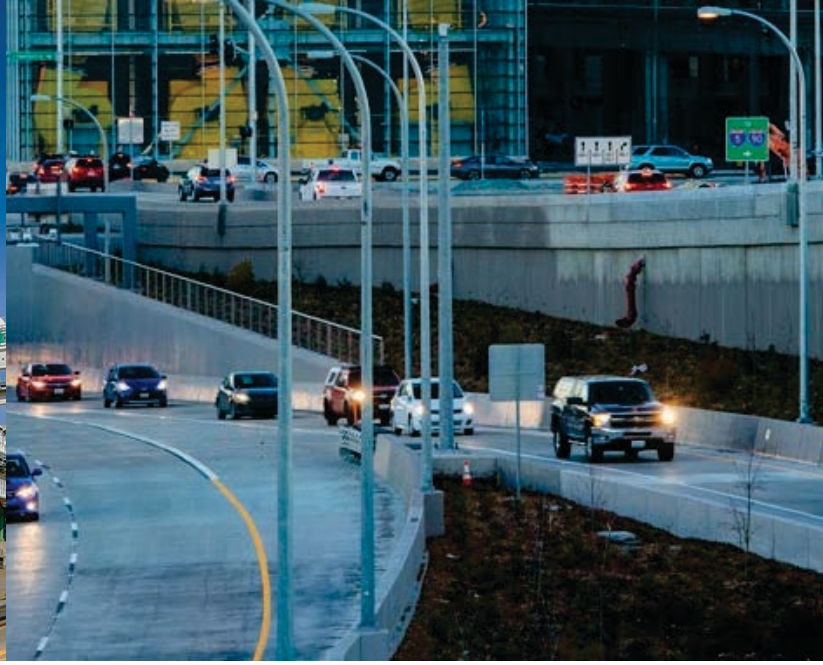
Gold Award for Engineering Excellence in Transportation and Mega Projects Category, NY ACEC, Rehabilitation of the Brooklyn Battery Tunnel, 1998

Employment History

HNTB: 2011 - present

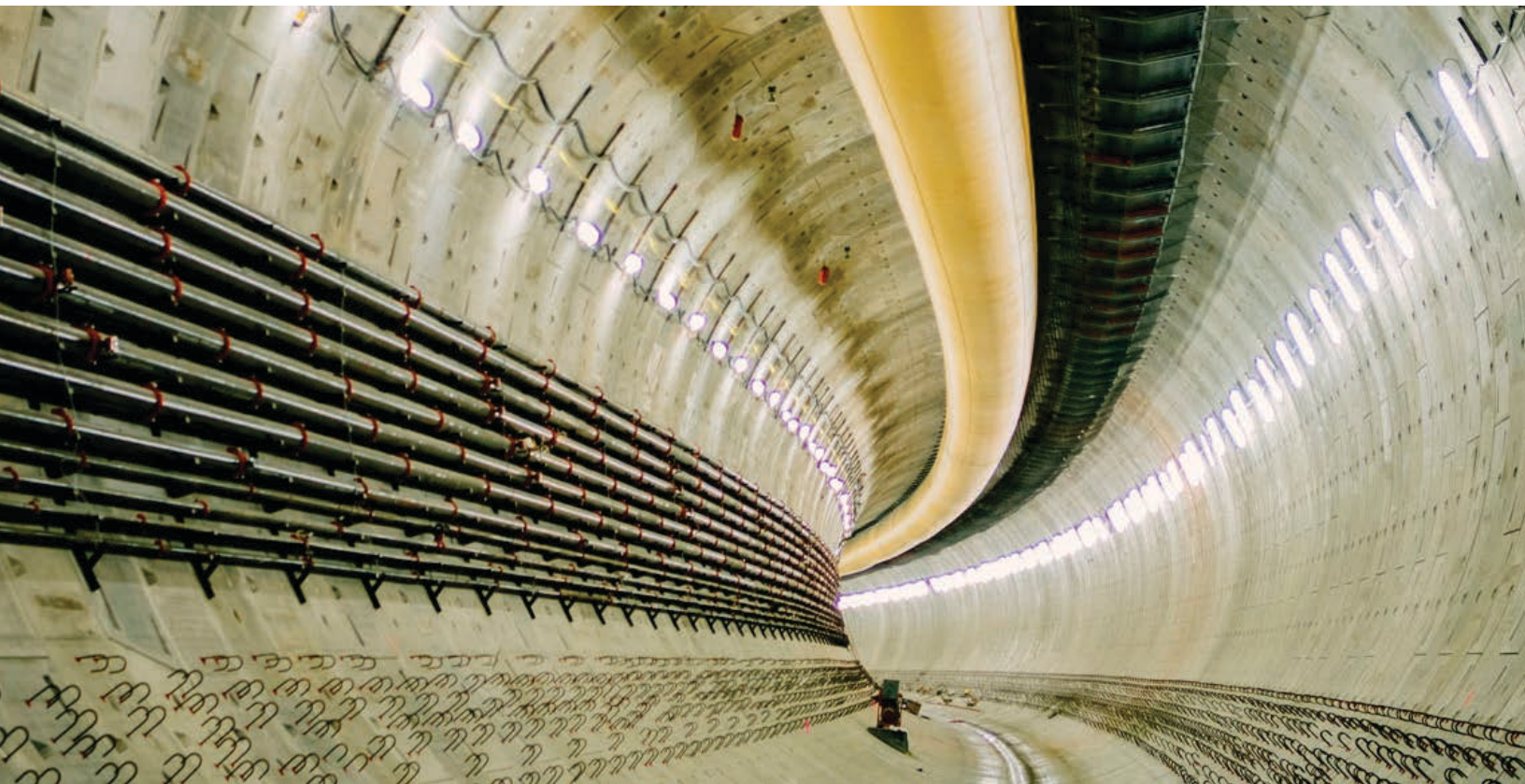
PB (WSP): 1992 - 2011

Energoprojekt (former Yugoslavia): 1988 - 1992



TUNNELING PROJECTS

Nomination for ITA Vice-President
In support of Sanja Zlatanic, PE

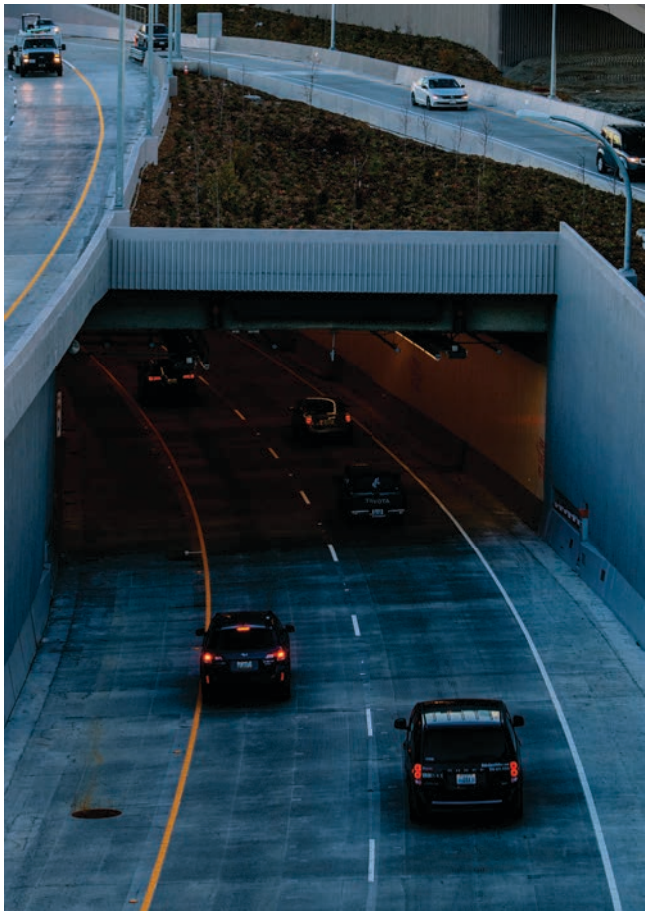


WASHINGTON STATE DOT

Alaskan Way Viaduct Replacement

Seattle, WA

Member of expert review panel and technical oversight lead for $3.1 Billion design build project of 2.1 miles bored tunnel that replaces the Alaskan Way Viaduct along the central Seattle waterfront. She led technical oversight for tunnel liner, interior structures and settlement mitigation measures design.

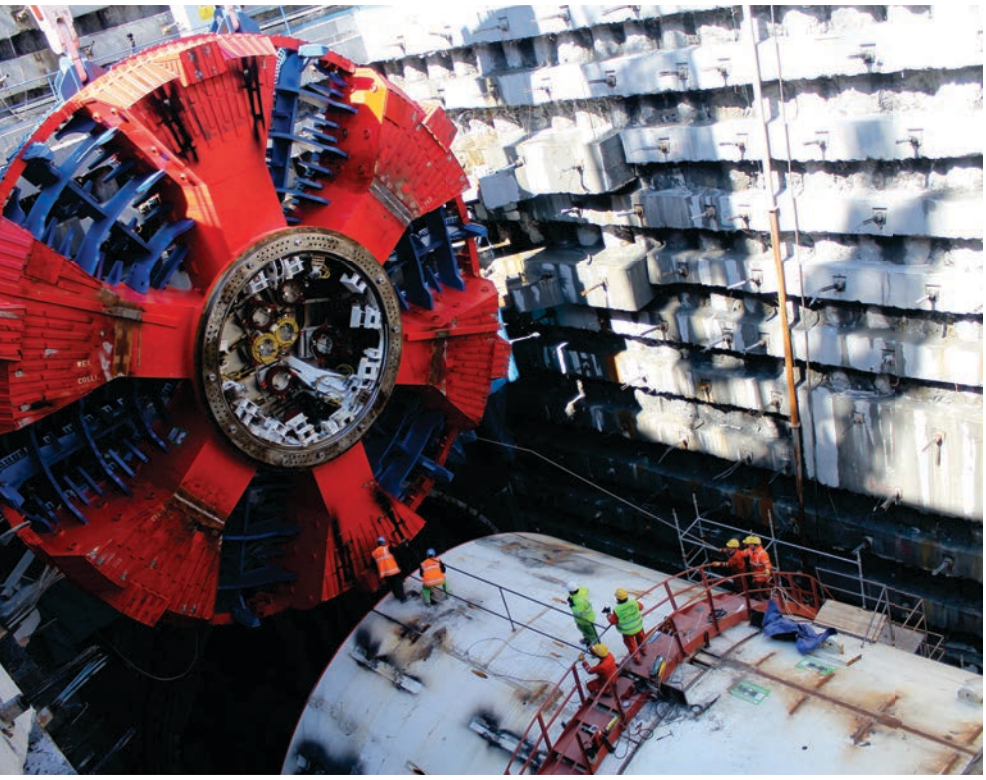


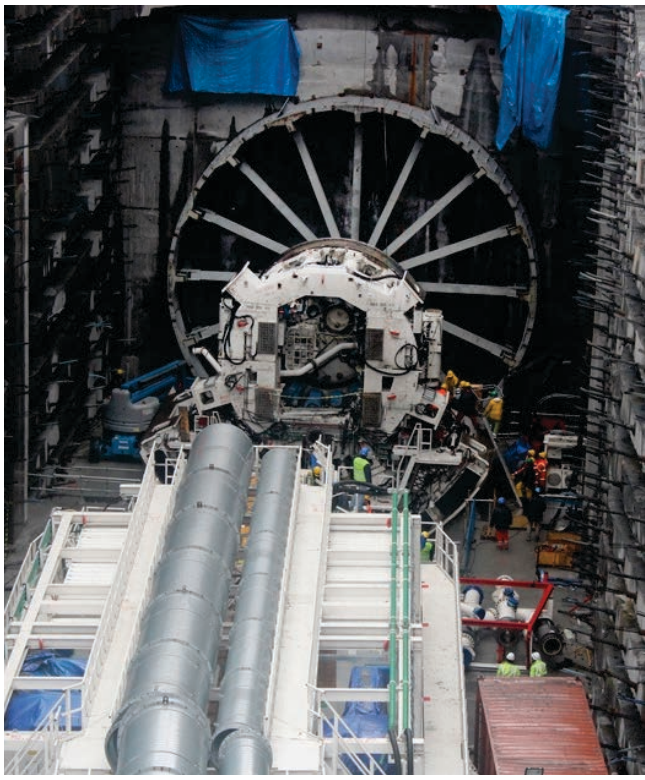
REPUBLIC OF TURKEY MINISTRY OF TRANSPORT

Instanbul Strait Road Crossing (Eurasia) Tunnel

Istanbul, Turkey

Project Manager and Independent Design Verifier for category 3 structures, systems and facilities for this $1.35B Istanbul Strait Road Tube Crossing project of 14.5 km in length that includes 5.4 km of road tunnels and 3.4km Bosporus Strait Crossing double-deck bored highway tunnel 13.2m (43.3 ft) in diameter (sixth largest tunnel in the world) and 2km Asian and European side tunnel approaches (roadways, toll plazas, ventilation and system buildings and facilities).





SOUND TRANSIT

West Seattle and Ballard Link Extensions Project

Seattle, WA

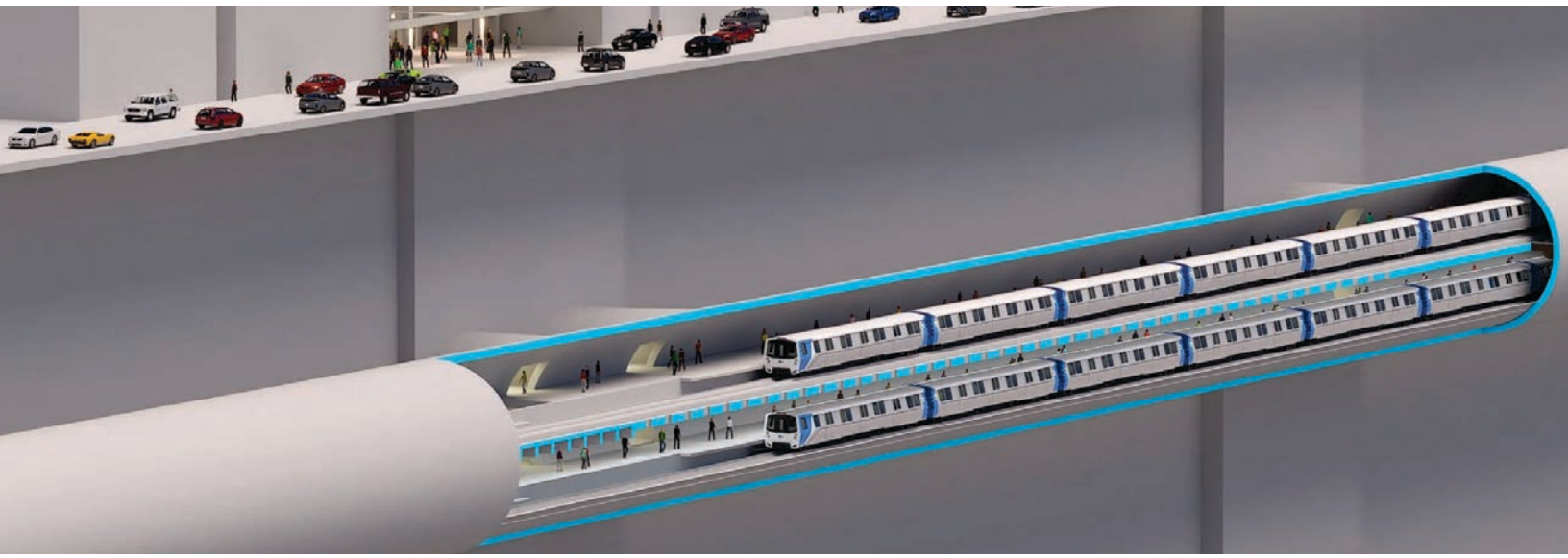
Technical advisor to Sound Transit for tunnels and complex underground structures through Alternatives Development Phase to establish and refine specific route, station locations and types, and tunnel alignment and types during planning and advanced conceptual stage of environmental assessment considering public and third-party inputs leading to the Sound Transit Board identifying the project Preferred Alternative.

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
BAY AREA RAPID TRANSIT

Single Bore Tunnel Technical Study and Phase II Program Management Services

San Jose, CA

Technical joint venture engineering lead for the Single Bore Tunnel Technical Study, and engineering manager for technical criteria and documents development as part of the program management team, featuring large diameter tunnel housing, 5.1 miles of double-track alignment and three underground stations through downtown San Jose, California.



LA METRO

Sepulveda Transit Corridor

Los Angeles, CA

Lead tunnel engineer for planning phase comprising defining most practical and least environmentally impactful route for the potential future longest tunnel in the U.Ss providing better transit between the San Fernando Valley.

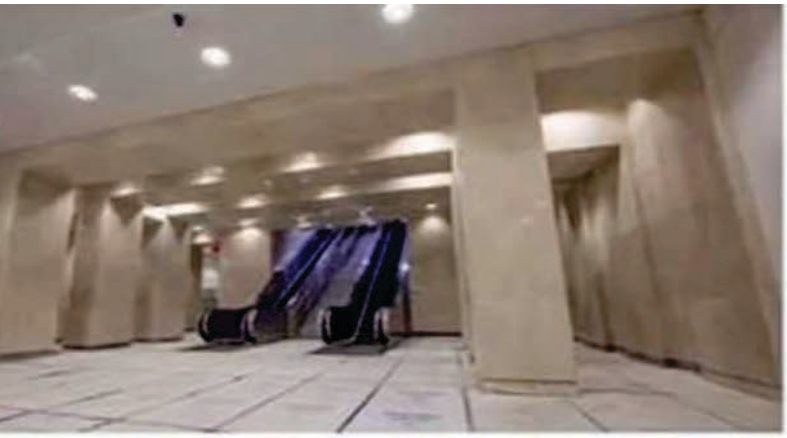
NEW YORK STATE METROPOLITAN TRANSIT AUTHORITY

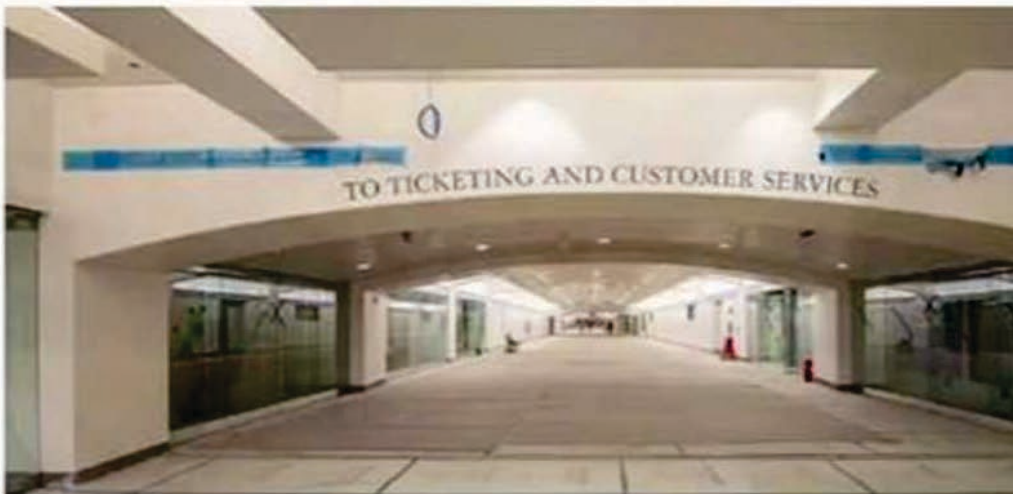
East Side Access

New York City, NY

Design manager who led the design development of the Manhattan segment deep station alternative and was responsible for the delivery of the final documents that resulted in the selection of the deep station scheme for this $7.6 billion project. The final documents included the construction methodology approach and comparative analysis of construction risk aspects.

This project enables the LIRR to provide direct service to the east side of Manhattan via a new eight-track terminal being constructed at Grand Central Terminal.





NEW YORK STATE METROPOLITAN TRANSIT AUTHORITY

Number 7 Subway Line Extension

New York City, NY

Design manager for the $2.1 billion extension of the No. 7 line from its current terminus at Times Square to a new station at 34th Street and 11th Avenue. She was responsible for the development of project-specific design criteria in conformance to industry-wide accepted design standards and codes for final structural designs of all mined structures, including multidisciplinary coordination and design integration. Throughout the final design, she led tasks encompassing design optimization through improvement of constructability, development of a construction packaging approach, and mitigation of construction risks.

NJ TRANSIT

Weehawken Tunnel

Weehawken, New Jersey

Project engineer responsible for all aspects of project completion – from condition assessment of the existing tunnel structure to the development of the final design documents and cost estimating for this $200 million project. As part of her responsibilities, she developed and implemented the design methodology used for consideration of design fire impacts to the tunnel and cavern final liners.

NEW JERSEY TRANSIT AND PORT AUTHORITY OF NEW YORK

Trans Hudson Tunnel (Access to the Regions Core)

New York City, NY

Chief engineer for underground structures and tunnels responsible for final structural designs and interdisciplinary design integration for all underground structures and facilities (running tunnels, caverns, ancillary and utility tunnels and shafts), including development and implementation of design strategies, criteria and mitigation methods for special loading conditions – fire, blast and structural considerations – to prevent progressive collapse.

TBTA

Hugh Carrey Tunnel Rehabiliation

New York City, NY

Project engineer during the project's construction stage, this project for MTA Bridges and Tunnels comprised tunnel ceiling rehabilitation, liner repair for damage caused by water leakage and roadway lighting improvements for the 9,717-foot-long (3,000-meter-long) Brooklyn Battery Tunnel – the second longest underwater crossing in the U.S. – connecting lower Manhattan and Brooklyn. She provided construction support services, reviewed and approved the contractor's alternative designs; developed preferred alternatives; evaluated the contractor's work; and coordinated communication between PB, the MTA and the contractor.