City of Seattle
Notice of Appointment

Name: Hal B.H. Cooper, Jr.		☐ **Executive Appointment** ☒ **Legislative Appointment** ☐ **Agency Appointment** ☐ **PDA Council** ☐ **PDA Constituency**
Residential Neighborhood: Kirkland	**Zip Code:** 98034	**Contact Phone No.:** 425-488-4798
Appointed to: Seattle Freight Advisory Board		**Date of Appointment:** December 15, 2014
Authority (Ord., Res.): Resolution 31243		**Term of Office:** **From:** Confirmation **To:** December 31, 2016

Comments:

Mr. Cooper currently serves as a consultant to the CP&Y engineering company, developing business in the Pacific Northwest for transportation and related projects. He has prepared studies related to the transportation of oil and coal by rail, and is familiar with Seattle through, among other activities, his work with Transystems to evaluate freight transport policies and infrastructure requirements for truck and train movement through Seattle.

Authorizing Signature:	**Name and Title of Officer Making Appointments:** Tom Rasmussen, Transportation Committee Chair

HAL B. H. COOPER, JR., PhD, P.E.

[redacted]

RESUME

EDUCATION

Ph.D.	Civil Engineering, University of Washington, Seattle, Washington	1972
M.S.	Civil Engineering, University of Washington, Seattle, Washington	1966
B.S.	Chemical Engineering, University of California, Berkeley, California	1963
H.S.	Graduate, John Muir School, Pasadena, California	1958

EMPLOYMENT

Consulting Engineer- Cooper Consulting Company, Kirkland, Washington	1993 - Present
Supervising Engineer- Brown and Caldwell Consultants, Seattle, Washington	1990 - 1993
Consulting Engineer- Courtland Engineering Corporation	1987 - 1990
President- Texas Railroad Transportation Company, Austin, Texas	1983 - 1987
Associate Professor- University of Texas at Austin, Austin, Texas	1974 - 1982
Assistant Professor- Texas A& M University, College Station, Texas	1972 - 1974
Research Engineer- National Council of Paper Industry for Air and Stream Improvement, Corvallis, Oregon	1965 - 1969

EXPERIENCE

Hal Cooper is a specialist in railroad transportation, infrastructure projects for light railroad commuter rail transit plus high speed, passenger rail systems and for freight railroad operations with emphasis on cool transport and intermodal freight. He has conducted railroad right-of-way evaluations for purposes of minimizing capital costs and community disruptions. He has prepared technical and economic analysis of proposed new railroad line construction projects in terms of right-of-way attention freight and passenger traffic projections and financial viability determinations. He has conducted energy requirement analyses for railroad operations with emphasis on railroad electrification projects and electric utility system impacts of increased electric loads.

QUALIFICATIONS

Registered Professional Engineer, State of Texas, No. 38180	1975
Engineer-in-Training, State of Oregon, No. 1375	1967

Author of five books, 150 articles, 116 reports and 11 technical bulletins

Foreign languages: French, German, Spanish (some) and Russian (some)

TRANSPORTATION EXPERIENCE

Schiller Institute, Wiesbaden, Germany **2006-2007**

Detailed analysis of railroad infrastructure requirements, alignments, costs and revenues for construction of worldwide electrified railroad network to connect Canada, Alaska, Russia and China for an international railroad network based on the proposed Bering Strait railroad tunnel plus the associated power plant and industrial and mining operation into a series of integrated energy transportation corridors. Presentation of keynote address at upcoming worldwide railroad infrastructure development corridors network conference in Wiesbaden, Germany on September 15-16, 2007.

Canadian Arctic Railway Company, Vancouver, British Columbia **2002-2007**

Preparation of a detailed technical and economic feasibility study of the construction of a new 2,100 mile railroad line between Alaska and Canada from Fairbanks, Alaska to Prince George, British Columbia plus connection routes to elsewhere in North America, plus Russia and Asia by way of the proposed Bering Strait Tunnel to connect the United States, Canada, Alaska, Russia and China.

Detailed right-of-way alignment analysis, infrastructure identification and inventory, capital cost estimation, traffic load projection, cash flow analysis and financial evaluation to support private sector project financing requests. Political lobbying and support with government and native organizations. Preparation of financial package for presentation to banking and other financial institutions as public-private partnership between private investment and government.

California Department of Transportation, Los Angeles, California **2004-2006**

Preparation of detailed technical and economic proposal and project implementation plan for the construction of a 32 mile long railroad tunnel under the Grapevine Grade between Grapevine and Costa, California to haul trucks and passengers between Los Angeles and Bakersfield on a 110 mile rail line as a complement to the proposal of high speed rail passenger system. Detailed right-of-way analysis, infrastructure layout and initial design, capital cost estimation, freight traffic projection analysis, electric power generation requirements, capital cost estimation, cash flow analysis and financial viability analysis. Preparation of financial and implementation plan for a public-private partnership to include railroad infrastructure plus electric power generation and transmission facilities for submission to California Governor Arnold Schwarzenegger.

Central North America Trade Corridor Association, Minot, North Dakota **2002-2004**

Preparation of project implementation plan and right-of-way identification plus capital cost analysis and traffic analysis for new railroad line between Portal, North Dakota and Del Rio, Texas through affected Indian reservations plus cash flow analysis for energy production faculties for presentation to the Bureau of Indian Affairs of the U.S. Department of Interior. The project plan for the inclusion into feasibility study for Canadian Arctic Railway Company of Alaska Canada rail extension.

Northwest Container Services Company, Portland, Oregon **2001-2002**

Conduct of detailed truck movement field study on major interstate highway routes in the western United States for assessment of intermodal division potential from road to rail as part of marked evaluation study. Detailed investigation of marketing pricing, competitiveness requirements, and comparative note determinations as part of analysis of future intermodal container short hauls rail service expansion. Interface with trading companies and state transportation agencies.

Rainer Valley (Save Our Valley) Coalition, Seattle, Washington **2000-2001**

Preparation of right-of-way alignment analysis of alternative infrastructure requirements, property displacement needs, utility relation determinations, station design needs and comparative capital cost evaluations for the Sound Transit Central Link light rail line though Rainier Valley of Southeast Seattle for elevated, surface and tunnel alignments to prepare detailed real estate assessment study. Recommendations in order to minimize and to mitigate future small business impacts and residential property disruption as well as project capital cost.

City of Tukwila Planning Department, Tukwila, Washington **1999-2001**

Preparation of detailed right-of-way analysis of alternative routes for the proposed Central Link Light rail transit system to minimize or eliminate commercial and residential property displacement impacts along major street thoroughfares. Redesign and relocation of light rail transit alignment from surface streets to freeway right-of-way alignments plus comparative environmental and land use impacts.

Preparation of alternative site analysis for a truck-rail intermodal terminal with right-of-way and real estate requirements plus street access impacts to proposed terminal location. Assessment of future truck haul traffic projections plus environmental and energy impacts of alternative road and rail movements between Seattle and Chicago by way of Tukwila international terminal.

Puget Sound Specialties Company, Tacoma, Washington **1998-1999**

Preparation of alternative alignments for a direct track access into the then proposed Tacoma Link light rail transit train maintenance faulty to minimize or eliminate adverse real estate disruption to an adjacent business. Development of capital cost analysis as to reduce train maintenance facility expense while eliminating need for acquisition of or disruption to adjacent business. Economic impact analysis of effects on adjacent business plus future business revenue and employment projections. Preliminary design and layout or future light rail transit line extension between Seattle and Tacoma plus associated rail train maintenance facility plus initial capital cost and ridership analysis. Site inspection tour of Portland Light rail train maintenance faulty plus light rail transit routes and planned extensions.

Puget Sound Regional Transit Authority, Seattle, Washington **1997-1998**

Design and cost analysis of proposed passenger train maintenance faulty for combination commuter, corridor and intercity passenger cars. Recommendation of design changes and track access for commuter train operations of Sound Transit so as to improve affiances and to reduce cost. Redesign and realignment of site plus track access realignment to reduce property acquisition and capital costs. Comprehensive site inspection tours of other West Coast commuter train maintenance facilities in San Diego, Los Angeles, San Francisco and Vancouver.

Hanson Realty Company, Escondido, California **1996-1997**

Preparation of technical and economic feasibility study of proposed height railroad line to connect the existing cargo and passenger port at Ensenedo and the proposed new intermodal container and bulk cargo port at Punta Colonet with main North American railroad networks at Yuma, Arizona. Determination of alternative route alignments, locations of industrial facilities and power plant(s) plus freight traffic projections and analyses and financial viability projections for purposes of real estate development and project investment.

Yakutia Railways Company, Yakutsk, Russia **1996-1997**

Preparation of technical and economic feasibility study of the then proposed 500 mile long extension of the Yakutsk Railway line between Berkakit, Tommot and Yakutsk in the Sakha Republic of northeastern Russia. This feasibility study included the upgrading of 200 miles of existing line plus the construction of 300 miles of new rail line along with major 5 mile long multiple use bridge over the Lena River for railroad pipeline, transmission and communications. Right-of-way alignments and analyses, track construction features, capital cost, freight and passenger traffic projections, cash flow projections and financial viability analyses of the final railway line.

ICF Kaiser Engineer, Inc. Seattle, Washington **1995-1996**

Preparation of freight traffic and economic analyses of container traffic movements along the Alameda Corridor following its completion into and out of the San Pedro Bay Ports of Los Angeles and Long Beach and of their implications for the Puget Sound ports of Seattle and Tacoma in terms of traffic diversion. Analyses of new and upgraded railroad infrastructure requirements in the Puget Sound area to improve and expand port operational throughputs to maintain competitive positions in the North American maritime traffic picture relative to Southern California and other ports.

Preparation of a detailed railroad infrastructure development plan for the overall Puget Sound metropolitan and to cover future freight and passenger traffic volume projections. Estimations of additional rail and road infrastructure development requirements plus additional right-of-way acquisitions and track expansion needs with capital cost estimates for alternative rail development scenarios for future freight traffic expansion.

Siberian State Transport University, Novosibirsk, Russia **1994-2002**

Preparation of railroad infrastructure development network for northwestern North America and northeastern Russia to facilitate interconnection with and construction of the proposed Bering Strait railroad tunnel between Alaska and Chukotka. Development of freight and passenger traffic projections by commodity and purpose for the joint development of the North American and Eurasian railroad networks together by way of the proposed Bering Strait railroad tunnel. Served as advisor to the faculty-student task force to evaluate the future traffic projection and regional economic impacts of constructing the Northeastern Russian railway network and the connections to the Bering Strait tunnel plus the implication for World Trade.

Airport Communities Coalition, Normandy, Park, Washington **1994-1995**

Preparation of comparative passenger traffic plus environmental and economic impact analysis of the possible diversion of short distance aircraft flights along the West Coast routes from air to rail on alleviating the need for constructing a new third runway at Seattle Tacoma International Airport. Identification of the railroad infrastructure development requirements along the West Coast railroad corridor routes to handle additional train traffic movements plus additional capital investments needs. Presentation of results to Airport Arbitration Panel of the Puget Sound Regional Council.

Burlington Northern Railroad Company, Fort Worth, Texas **1985-1986**

Preparation of an initial economic feasibility study of the possible electrification of the 1,100 mile long railroad line of the Burlington Northern Railroad between Laurel, Montana and Fort Worth, Texas used for coal hauling from Powder River Basin to Texas. Estimations of freight traffic movements, energy,

requirements, electricity, consumptions, utility impacts, capital costs, operating costs and financial evaluation of diesel and electric power options.

Central Power and Light Company Corpus Christi, Texas **1984-1985**

Preparation of a comparative environmental impact analysis of increased coal movements along the alternative Burlington Northern and Union Pacific Railroad lines between Wyoming and Texas which would result from the possible closure of the South Texas Nuclear Project in Bay City, Texas as compared to its continued operation. Assessment of environmental and safety concerns, plus right-of-way and track capacity expansion needs. Determination of electricity consumption requirements resulting from possible line electrification and associated diesel fuel savings. Site evaluation and capital cost estimate of a possible new rail bypass line across eastern Colorado for coal train movement between Wyoming and Texas to avoid Front Range railroad line congestion.

Texas Railroad Transportation Company, Austin, Texas **1983-1987**

Founder and partner of the private sector company, to develop a future high-speed train passenger system 700 miles long to connect Houston with Dallas and San Antonio. Preparation of technical and economic feasibility studies of the right-of-way requirements, passenger traffic projections, infrastructure requirements, capital costs, operating costs cash flow positions and financial viability analyses. Negotiations to acquire railroad right-of-way between Houston and Dallas plus rolling stock and electrical equipment purchase with French and German suppliers. Development and presentation of financing plans for project with lenders and investors. Development of detailed railroad infrastructure plan for Texas Triangle to coordinate passenger, commuter and freight service. Inspection of French and German high-speed rail passenger lines in operation and under construction in Europe.

Compagnie de Signaux et d'Enterprises Electrique, Paris, France **1981-1983**

Attendance as student at training seminar course on French rolling stock and fixed facilities railway equipment and systems. Detailed inspection and tour of French TGV high-speed rail line between Paris and Lyon to determine track design, signaling systems, electrification facilities, stations and tunnels and construction procedures. Tours of TGV high-speed railroad lines and stations plus factories for rolling stock, track, signaling and electrification components. Tours of nuclear power plants and nuclear fuel processing facilities and meetings regarding electric utility impacts of electrified railroad systems.

Advising and conduct of marketing surveys for marketing of French railway equipment and technology in the United States after visit to France for railway signaling and electrification.

Texas State Legislature, House of Representatives, Austin, Texas **1981-1983**
Committee to Study Rail Passenger Service in Texas

Initially Citizen Member, and then Committee Clerk of Committee to Study Rail Passenger Service in Texas of the Texas State House of Representatives. Conduct of public hearings, taking of testimony, field trips and inspections, and preparation of committee reports on rail passenger service needs in Texas. Preparation of initial technical and economic feasibility study of a proposed high-speed rail passenger system in the Texas Triangle to connect Houston, Dallas and San Antonio

Missouri Kansas Texas Railroad, Dallas, Texas(now part of Union Pacific Railroad) 1980-1982
Lower Colorado River Authority Austin Texas

Preparation of technical and economic feasibility study of the possible electrification of the 330 mile Missouri Kansas Texas Railroad line between Fort Worth and Houston, Texas. Determination of freight traffic projections, energy requirements, electricity consumption, electric utility system impacts, coal haul needs and electric utility supply coordination. Estimation of capital costs, operating costs, cash flow projections and financial viability determinations. Preparation of 4R-511 Federal loan application documents. Recommendation of combination construction of electrified railroad system for high-speed rail passenger and freight railroads on separate tracks of common rights-of-way. Inspection tours of Texas Utilities Company electrified railroad lines.

University of Texas at Austin, Center for Energy Studies, Austin, Texas 1976-1981

Preparation of energy impact analyses of coal train transport from the Rocky Mountains to Texas and the impacts of electrified railroad operation in Texas. Preparation of analyses of intermodal freight, coal transport and high-speed rail passenger operation on railroads and electric utilities in Texas. Preparation of initial technical and economic feasibility study of an electrified high-speed rail passenger transport system in the Texas Triangle to connect Houston with Dallas and San Antonio plus power plants.

US Department of Transportation, Federal Railroad Administration, Washington, D.C. 1977-1980

Preparation of network economic and environmental analyses for freight traffic environmental impacts and capital costs of alternative 10,000 mile, 26,000 mile and 42,000 mile national railroad electrification networks for freight and passenger transport plus electric utility impacts.

Texas State Attorney General's Office, Transport Di vision, Austin, Texas 1975-1980

Preparation of environmental impact analyses of proposed rail line abandonment, intermodal freight transport systems and coal transportation requirements for legal proceedings as an expert witness with the Office of the Attorney General of the State of Texas.

Kansas State Attorney General's Office, Topeka, Kansas 1979-1980

Preparation of an environmental impact assessment of the possible closure of certain Amtrak national rail passenger train routes by the U.S. Department of Transportation of behalf of the Office of the Attorney General of the State of Kansas as an expert witness.

Arkansas State Attorney General's Office, Little Rock, Arkansas 1978-1979

Preparation of a comparative environmental impact analysis of Western coal transportation to and combustion at the proposed Independence power plant of Arkansas Power and Light Company near Newark, Arkansas relative to local Arkansas lignite coal and other energy sources as an expert witness on behalf of then Arkansas Attorney General, Bill Clinton.

Texas A&M University, Texas Transportation Institute, College Station, Texas 1972-1974

Preparation of a report on the environmental and economic impacts of the possible electrification of the railroad lines in the Texas Triangle for freight and passenger service. Presentation of results at a conference on railroad electrification at the University of Wisconsin in Madison sponsored by the Federal Railroad Administration of the U.S. Department of Transportation.

SEATTLE FREIGHT ADVISORY BOARD

November 2014

Twelve members who serve a term of two years*:

- Five appointed by City Council, subject to City Council confirmation
- Six Appointed by Mayor, subject to City Council confirmation
- One Appointed by Port

**Some initial terms were for 3 years.*

D	Name	Appointed	Term Ends	Term #	Position	Appointed By
(6) M	Patrick Cohn	12/9/14	12/31/15	1st		City Council
(6) M	Frank Rose	12/9/14	12/31/15	1st		City Council
(6) M	Warren Aakervik	12/14/10	12/31/16	2nd		City Council
(6) M	Hal Cooper, Jr.	12/9/14	12/31/16	1st		City Council
(6) M	Terry Finn	12/14/10	12/31/16	2nd		City Council
(6) F	Linda Anderson	12/14/10	12/13/14	2nd		Mayor
	Vacant	10/1/12	12/13/14	1st		Mayor
(6) M	Mike Sheehan	2/8/11	12/13/13	2nd		Mayor
(6) F	Katherine Casseday	10/1/12	12/13/15	1st		Mayor
(6) M	Dan McKisson	12/9/14	12/31/15	1st		Mayor
(6) M	Tim Hillis	5/10/13	12/31/14	1st		Mayor
(6) F	Bari Bookout	12/14/10	n/a	n/a		Port

Diversity

	Men	Women	Vacant	Minority	(1) Asian-American	(2) African-American	(3) Hispanic Latina	(4) Native-American	(5) Other	(6) Caucasian
Mayor	2	2	1		0	0	0	0	0	5
Council	5	0		0	0	0	0	0	0	5
Port	0	1	0	0	0	0	0	0	0	1
Total	*7*	*3*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*11*