**Bob Dyer** is a registered Professional Engineer in both Washington and Utah and currently serves as the Assistant State Construction Engineer at WSDOT. He earned his Bachelor of Science in Civil Engineer degree from Washington State University and his MSCE from the University of Washington. Bob has worked for a wide variety of both public and private sector employers including WSDOT, Utah State DOT, Wolf Creek Resort  (a Utah Ski Resort), PTG DeLeuw Cather, Parsons Brinckerhoff and Gardner Engineering and in locations as varied as Baton Rouge LA and Detroit MI. He has worked for WSDOT throughout the state and has been continuously involved in most aspects of highway construction management during his 30+ year career.

**Jessica Knickerbocker, Project Manager, City of Tacoma**

Jessica is a project manager with experience in the design, analysis, and review of municipal stormwater projects. Her design experience includes site development and public infrastructure focusing on Green Infrastructure. Some of Jessica’s notable projects include the retrofit of the roadways and parking lots at Cheney Stadium to include porous asphalt, bio-retention and sustainable landscaping, in addition the retrofit of two existing residential and an arterial street with permeable pavement.  These projects were the first public pervious roads in Tacoma.  As a result, Tacoma is recognized as a leader in the nation of Greenroads™ certified roads, a rating system which certifies sustainable roadway and transportation infrastructure projects.

**Tim Horton** has over 10 years of roadway and transportation engineering expertise and is currently a Project Engineer at Skillings Connolly, where he provides construction management and ADA design services on transportation projects. Tim spent the beginning of his career focused on varying aspects of highway inspection including pavement design, pavement inspection, and density testing on local streets and highways.  In recent years, Tim focused on heavy civil design for WSDOT, working in both rural and urban communities before recently transitioning to the private sector at Skillings Connolly. Tim has written specifications for a variety of construction elements throughout his career.  His current project includes coordinating with several interest groups to create a standard specification for Porous Hot Mix Asphalt. Tim is a registered Professional Engineer in Washington State.

**Mark Palmer** is registered Professional Engineer and is currently the City Engineer for the City of Puyallup. Mark has been designing porous pavements into his projects since the early 1990s. His porous pavement projects include various uses such as trails, maintenance roads, parking lots, driveways, alleys, residential and arterial roads. The projects have included porous asphalt, pervious concrete, pervious gravel, permeable pavers and GravelPaveTM. Several City of Puyallup local street projects using porous asphalt are the subject of his presentation on maintenance of porous pavements: 8th Ave NW LID Retrofit, 6th Ave SW and Wilson Loop, as well as a discussion on the pervious gravel alleys installed by Streets crews. Mark currently has three major arterial projects with porous pavements in various stages of design.

**Steve Davis** is the Bituminous Materials Engineer at the WSDOT Headquarters Materials Laboratory in Tumwater WA, where he has worked since 1999.  Prior to becoming the Bituminous Materials Engineer, Steve was the Asphalt Laboratory Supervisor (1999-2005) and the Mixtures and Technology Engineer (2005-2011).  Steve began working for WSDOT in 1984 at the Olympic Region Materials Laboratory as a summer temporary while in college.

**Lindsi Hammond** is a Project Engineer with Pavement Services, Inc. She is a registered Professional Engineer with 5 years of experience providing pavement engineering services to public agencies throughout the Pacific Northwest.  Lindsi has considerable experience in pavement design and pavement management of roadway and airport pavement systems.  A graduate of Colorado State University, Lindsi has gotten to know the State of Washington well in the past few years on projects throughout the state—from Everett to Cle Elum, from Paine Field to Port Angeles, and from Washougal to Walla Walla.

**John Duval** is the President and Principal Engineer of Pavement Services, Inc. and is a registered Civil Engineer and Geotechnical Engineer with 25+ years of experience in the design and construction of highway and airport pavements. Previously, John served as the Asphalt Institute Pacific Northwest Regional Engineer for more than 7 years where he forged strong relationships with public works officials and asphalt producers in a nine-state region from Washington to Colorado. In 20 years of service as a Civil Engineering Officer for the USAF and USAF Reserve, John directed pavement evaluations in dozens of locations worldwide.

**Don Etnyre** is the Vice President of Sales at E.D. Etnyre & Co., one of the most recognizable company names in the asphalt paving industry. Don is the fourth generation at the Oregon, Illinois based company which was founded in 1898 by Don’s great grandfather. E.D. Etnyre & Co. has a long tradition as inventors, innovators and manufacturers of asphalt distributors and related equipment. Don has unmatched knowledge in asphalt distributor operations.

**Mike Bussard** has been involved in the asphalt milling industry as a key employee for PR Systems, Inc. for over 25 years. Mike started in 1996 as a rotomill operator, spent 15 years as a Project Superintendent for PR Systems and is now the company’s General Superintendent. Mike has worked throughout the Pacific Northwest and is well experienced in all of the means and methods available to achieve high quality milling results.

**Tracy Lambert** is the West Coast Regional Manager for Carlson Paving Products, Inc., a leader in highway class asphalt paving screed technology, asphalt pavers and related equipment for over 25 years. Tracy has over 24 years of experience in the Pacific NW, working in the asphalt industry in retail sales and as a factory representative. A former United State Marine, Tracy grew up in the construction industry working in his early years at his Dad’s masonry company and for paving companies in his native state of West Virginia.

**Jeff Uhlmeyer** has over 30 years of experience with WSDOT with the past 20 related to pavement engineering.  Jeff currently serves as the State Pavement Engineer and manages WSDOT’s pavement design and pavement management activities for both asphalt and concrete roadways.  He is a registered Professional Engineer and is active with TRB, NCHRP, FHWA and industry initiatives related to pavements and asset management, materials and research. Jeff serves as a key member of the WSDOT/WAPA Improving HMA committee.

**Bill Dempsey** earned his Bachelor of Science in Civil Engineering (BSCE) degree from the University of Washington and he is a registered Professional Engineer in Washington State. Bill has spent his entire career working for Lakeside Industries, one of the State’s premier asphalt paving companies. Bill’s early experiences in Quality Control and Project Engineering/ Management led to his promotion to Division Manager in 2002 and then to Production Manager at Lakeside in 2006 where he is responsible for the HMA production facilities at all of Lakeside’s 17 asphalt plants and related facilities. Bill is the 2015 President of the Washington Asphalt Pavement Association (WAPA).

**Dave Gent** holds a BSCE degree from the University of Washington and an MBA from City University of Seattle. As an undergraduate, he was involved in original asphalt paving materials research and forensic pavement engineering as a Research/ Laboratory Assistant at UW and has remained employed in the HMA arena all of his professional life. Dave is a registered Professional Engineer and a past President of WAPA. He also serves as the co-chairman of the WSDOT/WAPA Improving HMA joint specification committee. Dave has worked throughout the state estimating and managing heavy civil and HMA construction projects for 32+ years for two private companies - Wilder Construction Co., Inc. (1982 - 2002) and ICON Materials (2002 – 2014). He accepted his current position as the Technical Director of WAPA in August of 2014.

Available Additional References/ Resources

**WAPA On-Line Technical Reference Sites**

National Asphalt Pavement Assoc.: [www.asphaltpavement.org](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2112&&&http://www.asphaltpavement.org)

Washington Asphalt Pavement Assoc.: [www.AsphaltWA.com](http://www.AsphaltWA.com)

Drive Asphalt: [www.driveasphalt.org](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2113&&&http://www.driveasphalt.org)

Asphalt FACTS: [www.asphaltFACTS.com](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2114&&&http://www.asphaltfacts.com/)

Warm-mix asphalt: [www.warmmixasphalt.com](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2115&&&http://www.warmmixasphalt.com)

For members of the community to learn about asphalt plants: [www.beyondroads.com](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2117&&&http://www.beyondroads.com)

National Center for Asphalt Technology: [www.ncat.us](http://www.ncat.us)

Asphalt Pavement Alliance: [www.AsphaltRoads.org](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2120&&&http://www.AsphaltRoads.org)

Asphalt, The Sustainable Pavement: [www.PaveGreen.com](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2121&&&http://www.PaveGreen.com)

The Asphalt Institute: [www.asphaltinstitute.org](http://www.asphaltinstitute.org)

Noise reduction: [www.quietpavement.com](http://www.quietpavement.com)

Warm-mix asphalt: [www.warmmixasphalt.com](http://www.warmmixasphalt.com)

**American Public Works Association (APWA) Division 5 General Special Provisions for Local Agencies:**

<http://www.wsdot.wa.gov/partners/apwa/Division_5_Page.htm>

**Porous Asphalt Issue Links:**

Porous asphalt pavements: [www.porouspavement.net](http://tracking1.naylorcampaigns.com:80/track?type=click&eas=1&msid=&auid=&mailingid=546609&messageid=546609&databaseid=546609&serial=16813256&emailid=dave.gent@asphaltwa.com&userid=561534&targetid=&fl=&extra=MultivariateId=&&&2116&&&http://www.porouspavement.net)

Porous Construction Video: <http://www.youtube.com/watch?feature=player_embedded&v=I16WGau3jxE>

NAPA Porous Asphalt Pavements for Stormwater Management IS-131 publication: <http://store.asphaltpavement.org/index.php?productID=179>

Graduated cylinder Infiltration Video: <http://www.youtube.com/embed/ZzmrToNZCNw?rel=0&autoplay=1>

C1701 Infiltration Rate Video: <http://www.youtube.com/watch?v=Uroo0WMmwio>

**Thinlay Paving Links:**

NAPA IS-135 Thin Lift Paving publication: <http://www.asphaltpavement.org/images/stories/is-135.pdf>

Equipment World Thinlay Article: <http://www.equipmentworld.com/road-science-thin-is-in/>

Flexible Pavements of Ohio presentation: <http://www.flexiblepavements.org/sites/www.flexiblepavements.org/files/events/conferences/Thin%20Overlays%20for%20Pvmt%20Preservation.pdf>

FHWA Thin Lift Overlay Checklist: <https://www.pavementpreservation.org/wp-content/uploads/FHWA_Checklists/3%20-%20Thin%20Hot-Mix%20Asphalt%20Checklist.pdf>

**Tack Coat Best Practice Links:**

NCHRP 712 Optimization of Tack Coat for HMA: <http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_712.pdf>

NAPA QIP-128E – Best Practices for Emulsion Tack Coats: Available to WAPA Joint Training attendees by request

Non-Tracking Tack Additive-Nanotac: Contact Jerry Thayer-Zydex Industries: [jerry.thayer@matcon-inc.com](mailto:jerry.thayer@matcon-inc.com)

<http://www.zydexindustries.com/webfiles/Products/05252014022527FLY_RD_NT_001_01_08212014_Nanotac_Flyer.pdf>

**Asphalt Milling Article Links:**

Micro-milling defined: <http://pavementrecycling.com/pdf/micro_milling.pdf>