



Preliminary Agenda and Registration

May 20-24, 2001
Seattle, Washington

AASHTO 2001 BRIDGES: THE VITAL LINK

MEMORANDUM

TO: Members and Invited Guests of the
AASHTO Subcommittee on Bridges and Structures

FROM: J. A. Weigel, P.E., Bridge and Structures Engineer,
Washington State Department of Transportation

DATE: February 23, 2001

SUBJECT: Annual Meeting of the AASHTO Subcommittee on Bridges and Structures
Seattle, WA, May 20 - 24, 2001

Welcome:

It is my privilege and pleasure to welcome you to this year's annual AASHTO Subcommittee on Bridges and Structures Meeting in Seattle, in the great northwest.

This will be a tremendous challenge following the productive and well-run meeting Randy hosted in South Carolina last year. We all enjoyed the Southern hospitality and the beauty of the Charleston area. The pace in Seattle may be a bit stepped up and the weather may sometimes be a bit wet, but the people and the area are great and I hope everyone will experience a very productive and enjoyable stay in Seattle.

I believe that the companion program put together by Jean Canfield will also provide an excellent cross-section of activities and culture unique to the Puget Sound area.

The weather should be comfortable, so let's enjoy it by wearing casual attire (in other words, no ties). We are proud and pleased to be hosting this important national meeting.

Welcome to Seattle!



J. A. Weigel, P.E.
Bridge and Structures Engineer

Visit our web site at: www.wsdot.wa.gov/eesc/bridge/aashto/index.htm

AASHTO 2001 BRIDGES: THE VITAL LINK

The State of Washington is honored to host the AASHTO Bridge Subcommittee 2001 meeting in Seattle, Washington. The meeting will start Sunday, May 20, 2001 with a Golf Tournament followed by the evening Icebreaker. Please plan to attend the meeting and enjoy all the great dining, entertainment, and educational opportunities offered here in the City of Seattle.

The meeting will end on Thursday evening, but for those wishing to stay over until Friday, May 25, we are offering an optional tour of one of Washington's famous floating bridges. Tour participants will have the opportunity to actually go inside one of the pontoons. (*See additional details on page 4*).

LOCATION

The meeting will be held at the **Doubletree Hotel - Seattle Airport** which is located ten minutes from the Seattle-Tacoma International Airport (Sea-Tac to locals). A *complimentary shuttle service* is available between the airport and hotel. Rental cars are available at the airport.

The Sunday evening Icebreaker, daily committee meetings, and the Wednesday evening banquet will be held at the Doubletree Hotel.

HOTEL RESERVATIONS

All participants are responsible for making their own hotel reservations. Call directly to the Doubletree Hotel - Seattle Airport where a block of rooms are being held for meeting participants. (Phone direct to hotel 1-206-246-8600 or call 1-800-222-7433.)

When calling for reservations please identify yourself as a participant in the AASHTO conference to receive the special conference rate of \$116 per night (single or double).

DRIVING DIRECTIONS

From Seattle (North) Take I-5 South (pass exit for Sea-Tac Airport). Take Exit 152 for South 188th Street & Orillia Road. Stay to right and follow sign to 188th Street. Merge onto 188th Street heading West. Doubletree is one mile to West on right corner of Highway 99/International Blvd. and 188th Street.

From Tacoma (South): Take I-5 North. Take Exit 152 for South 188th Street and Sea-Tac Airport. Turn left onto 188th Street heading West. Doubletree is approximately one mile to the West, on right hand corner of Highway 99/International Boulevard and 188th Street.

Parking: Parking is complimentary for overnight guests (one car per room). Please ask at front desk for parking permit when checking in.

SCHEDULED SOCIAL EVENTS

ICEBREAKER RECEPTION

An **Icebreaker** reception is scheduled for Sunday evening from 6:00 - 8:00 pm in the hotel ballroom. This event is hosted by our Consulting Engineer Partners and will include a short welcome to Washington. The attire is business casual.

BANQUET

The Wednesday, May 23, banquet will also be held in the hotel ballroom starting with cocktails at 6:00 pm. Banquet cost is included in your registration fee. Dress for this event is also business casual. There will be a separate charge for spouse/companions (*see registration form*).

Vegetarian meals are available. Be sure to indicate on your registration form the number of vegetarian meals you desire.

A special program featuring **Patt Schwab** of “FUNdamentally Speaking” has been arranged for your enjoyment. Pat is a very entertaining and popular speaker.

COMPANION PROGRAM

Spouse/Companion tours are scheduled for Monday, Tuesday, and Wednesday (*see page 8*). Weather in Seattle is usually mild with temperatures in the mid 60s to low 70s, with the possibility of light rains. A complimentary Continental Breakfast will be available to companions from 7:30 to 10:00 am, Monday through Thursday mornings.

GOLF OUTING

A golf tournament will be held Sunday, May 20. Registration and team assignments will begin at the golf course. Cost will be \$60 per person, including lunch, transportation, and prizes. You will be back at the hotel in time for the Icebreaker.

If you wish to play in the tournament, return the golf tournament registration form (*see page 9*) to Mr. Ed Power at the address indicated on the form. The \$60 golf fee must be included in the check made to AASHTO Bridge 2001 for conference registration. *Do not send check to golf sponsor or Mr. Ed Power.*

MARINER BASEBALL GAME (OPTIONAL)

On Sunday afternoon at 1:35 pm, the **Seattle Mariners** will be playing the **New York Yankees** at the new Safeco Field. Seats will run from \$15 regular to \$36 for box seats. This is an important game and tickets are going fast. You will need to **arrange your own tickets** by calling TicketMaster (206-622-4487), or e-mail your request to www.ticketmaster.com. Please be sure to indicate on the registration form if you have tickets to the game. Transportation will be arranged to take you from the hotel to the ball park and return. The game should be over in time for the Icebreaker at the hotel.

SCHEDULED SOCIAL EVENTS

CONTINUED

SPECIAL FRIDAY MORNING TOUR OF LAKE WASHINGTON FLOATING BRIDGE (OPTIONAL)

(LIMITED TO 75 PARTICIPANTS)

Here is a once in a life time opportunity. Join us for a tour of a floating bridge on Lake Washington. The boat will dock at the west end of the Homer Hadley Floating Bridge, which has a floating length of over a mile. A floating bridge was utilized to cross the lake due to its depth at mid-span of over 200 feet. Climb down into a typical pontoon which is approximately 360 feet long and 75 feet wide. You will see an anchor cable gallery, pontoon to pontoon bolted joint, water detection system, water tight doors, bilge pumping system, and a modular expansion joint. Members of our bridge design and maintenance teams will lead the tour and be available to answer your questions. Please dress in comfortable clothing and firm soled shoes. This is one of only a handful of floating bridges in the world and will be a day to remember.

The tour will also include a narrated Lake Washington boat tour highlighting Washington's unique floating bridges, and also the homes of the "Rich and Famous" living on the lake. (*Bill Gates, Paul Allen, Nordstroms, etc.*)

No worry about the weather – the 110 foot *MV Kirkland* is an original 1924 wooden hull ferry, completely restored, with both interior and exterior decks, 14' ceiling and 12' windows.

Please note that subcommittee members and member representatives will have first option to sign up for the tour, after that space will be allotted on a first come basis.

The boat trip, box lunches, and transportation from the hotel to the boat and return is included. Price: **\$40**

TECHNICAL COMMITTEE MEETINGS

Technical Committees will meet between 8:00 am and 5:00 pm on Monday, May 21, and 8:00 am to 4:00 pm, on Tuesday, May 22. Wednesday morning will be set aside for the Technical Committees to meet as needed for preparing final drafts of addenda for new specifications and reproducing them for distribution in the General Session. Please refer to the *tentative* Technical Committee Schedule. Every effort will be made to avoid conflicts where one is a member of multiple committees; however, a few conflicts may occur. A business meeting of State Bridge Engineers is scheduled on Tuesday from 4:00 - 5:00 pm.

SUBCOMMITTEE MEETING

The Subcommittee is scheduled to meet from 1:00 - 5:00 pm Wednesday, and from 8:00 am - 5:00 pm on Thursday.

AASHTO 2001 BRIDGES: THE VITAL LINK

TENTATIVE TECHNICAL COMMITTEE MEETING SCHEDULE

MONDAY, MAY 21, 2001

	MEETING ROOM A	MEETING ROOM B	MEETING ROOM C	MEETING ROOM D
8 - 9 am	T-3 Seismic Design James E. Roberts CA	T-14 Steel Design Ed Wasserman TN	T-1 Aluminum Harry James MS	T-17 Welding James E. Sothen WV
9 - 10 am		T-16 Timber Structures James Tukey, ME	T-7 Rail Dan Davis AZ	
10 - 11 am				T-6 Editing TBA, MI
11 - Noon				
Noon	Lunch on your own			
1 - 2 pm	T-15 Substructures & Retaining Walls Randy Cannon SC	T-13 Culverts VanPortFleet MI	T-19 Computers Ken Hurst KS	T-9 Corrosion Wayne Aymond LA
2 - 3 pm				T-8 Movable Bridges Stanley Woods, WI
3 - 4 pm				
4 - 5 pm				

TUESDAY, MAY 22, 2001

8 - 9 am	T-11 Research Malcolm Kerley VA	T-18 Bridge Replace Survey & Inspection Stds. Stanley Woods WI	T-10 Concrete Design William Nickas FL	T-21 Fiber Comp. Paul Liles GA
9 - 10 am				T-12 Sign Supports Pat Collins NY
10 - 11 am				
11 - Noon				
Noon	Lunch on your own			
1 - 2 pm	T-4 Construction Ken Hurst KS	T-5 Loads and Load Distribution James E. Sothen WV	T-2 Bearings and Expansion Devices Ralph Anderson, IL	FHWA
2 - 3 pm				
3 - 4 pm				
4 - 5 pm	Bridge Engineers Meeting			

AASHTO 2001 BRIDGES: THE VITAL LINK

TENTATIVE SCHEDULE

WEDNESDAY, MAY 23, 2001

8:00 - 10:00 **VARIOUS ROOMS** - to be announced later (tables available for informal meetings)

Members of Technical Committees meet to finalize drafts of addenda and/or specifications and make necessary copies for distribution in the General Session

10:00 - 12:00 **BALL ROOM** - AASHTO Bridge Subcommittee
Chairman's Lecture Series

12:00 - 1:00 **LUNCH ON YOUR OWN**

1:00 - 5:00 **BALL ROOM**
General Session of the Subcommittee on Bridges and Structures

THURSDAY, MAY 24, 2001

8:00 - 12:00 **BALL ROOM**
General Session of the Subcommittee on Bridges and Structures

12:00 - 1:00 **LUNCH ON YOUR OWN**

1:00 - 5:00 **BALL ROOM**
General Session of the Subcommittee on Bridges and Structures

ONLY IN WASHINGTON STATE

SAFECO FIELD

More than two years in the making, the Seattle Mariners' baseball stadium was finally ready for baseball and opened July 15, 1999. It's the most expensive new ballpark in the United States. Opening night sold out long before the first game, and the stands were filled with more than 44,000 fans. The stadium's open (retractable) roof lets upper-deck fans see the downtown Seattle skyline and Elliott Bay. More than 50 engineers worked 60,000 hours to design SAFECO Field's technical marvel, which can safely withstand the worst of Seattle's weather. But – it will shut out the rain!

It was oriented to block the worst of the prevailing southwest storm winds. The 11-ton retractable roof rolls into "closed" position on eight 36-inch steel wheels, sliding into place in less than 20 minutes. It has natural grass – a blend of Kentucky bluegrass and perennial rye grass. The main scoreboard is 56-foot-tall, visible from all seats in the stadium, and announces current scores and news from every game in baseball. Only 24,000 season tickets were sold for 1999, leaving remaining seats available for individual-game purchase at prices between \$15 and \$36.

WASHINGTON STATE FERRIES

Washington State Ferries operates the largest ferry fleet in the United States. It has 29 ferries, including 4 passenger-only vessels, which cross Puget Sound carrying over 23 million passengers to 20 different ports of call. From Tacoma, Washington, to Sidney, British Columbia, 25,587,112 passengers were carried in 1997. The largest car ferries in the fleet are the new Jumbo

Mark II ferries, *MV Tacoma*, *MV Puyallup* and *MV Wenatchee*, which carry 2,500 passengers and 218 cars. Enough fuel to run 64,000 cars for an entire year is saved by people riding the ferries. Average number of cups of Starbucks' coffee sold per week on the ferries: 12,000.

WASHINGTON'S NEWEST FLOATING BRIDGE

(ONE OF THE FEATURED BRIDGES ON FRIDAY'S TECHNICAL TOUR)

The Lacey V. Murrow bridge, carrying east bound I-90 traffic, is the newest of the three concrete floating bridges across Lake Washington. The construction was completed in the fall of 1993 at a cost of \$88M. The floating portion consists of 20 concrete pontoons with the typical pontoon (360'x 60'x18') made up of 2,500 cubic yards of concrete and 1,422,000 pounds of reinforcing steel for a total weight of 5,880 tons. The

average draft is 8.6 feet. The total concrete and reinforcing steel for the pontoons is 49,600 cubic yards and 28,380,000 pounds respectively. The bridge is secured by 44 transverse and 12 longitudinal anchors. There are two types of anchors; 31 jetted fluke anchors (95 tons) in soft material and 25 gravity anchors (1200 to 1400 tons) on hard material.

TACOMA NARROWS SUSPENSION BRIDGE

The 2,800' main span of the Tacoma Narrows Suspension Bridge remains the fifth longest span in the United States. The original two-lane Tacoma Narrows Bridge, known as "Galloping Gertie," collapsed during high winds from extreme torsional oscillations within four months of opening to traffic in 1940. The replacement four-lane Tacoma Narrows Suspension Bridge opened to traffic on October 14, 1950 with substantial improvements made to its aerodynamic stability. The 46'-8" roadway carries all four lanes of SR 16 traffic and is

approximately 220 feet above the water, the main cable diameter is 20 1/8" supported by twin steel towers that are 462 feet high. On June 15, 1999, WSDOT entered into a Franchise Agreement with United Infrastructure of Washington (a Bechtel subsidiary) which allows for a toll financed Design-Build Contract to construct a Parallel Suspension Bridge located adjacent to the existing bridge. The new bridge is scheduled to open to traffic in the year 2005 and will carry east bound State Route 16 traffic.

ONLY IN SEATTLE

- Seattle is home to Microsoft, Boeing, Starbucks, Eddie Bauer, REI, and Nordstrom.
- *Sleepless in Seattle* was filmed here, and is also the locale of TV's sit-com *Frasier*.
- More coffee is served in Seattle than anywhere else – just count all those espresso stands!
- Seattle Center features the Pacific Science Center, Experience Music Project – a rock and roll music

- museum, Children's Museum, Space Needle, shops, and restaurants.
- Wonderful views of Mt. Rainier standing 14,411 feet above sea level.
- Museum of Flight – see the Red Barn – the original home of Boeing and many planes on display.
- The Ballard Locks linking Lake Washington, Lake Union and Puget Sound.

COMPANION TOURS

MONDAY - EMERALD CITY DAY

Your first day will include a stop at Pike Place Market, shopping at world class stores, and luncheon at the Space Needle!

You will begin the day with a continental breakfast at the hotel, followed by a short motor coach ride to downtown Seattle. First stop will be Pike Place Market where local farmers sell their produce to city dwellers. It also features seafood, arts, and crafts. From there it is a short walk to Westgate Center where you will visit the flagship store of Nordstrom, located in the center of shopping, and near the Monorail and Space Needle. A

short trip by Monorail will bring you to the base of the Needle, 605 feet, the symbol for Seattle. It was built in 1962 for the Seattle World's Fair. We'll leave time to go to the top and enjoy a spectacular view of the surrounding countryside, city, and mountains. After a fabulous lunch at the Space Needle your travels will take you to Seattle's bustling waterfront for a short stop where you can view Washington's ferries, the shimmering bay and the sparkling Olympic mountains.

Return to the Hotel – 4:00 pm

\$50 per person (Includes Monorail and Space Needle Lunch)

TUESDAY - NORTHWEST SAMPLER

Your full-day adventure will include a stop at Molbak's Greenhouse and Nursery, a favorite stop for gardeners as well as those who enjoy their fine gifts and floral displays. Great place to find just the right gift to send back home.

Next, we will visit Chateau Ste. Michelle Winery, a major producer of premium wines, and will sample award winning wines on a guided tour. Washington's largest winery is housed in an elegant French style chateau surrounded by 87 acres of arboretum-like grounds. Chateau Ste. Michelle Winery has national recognition for their fine wines.

Snoqualmie Falls is famous for this drop of 268 feet (100 feet higher than Niagara Falls). The falls was the mythical location of TV's "Twin Peaks".

Gilman Village is a unique collection of 55 shops in restored historic buildings. The site connects its shops of gifts, toys, jewelry, antiques, home/decor, restaurants, and specialty items by a wooden boardwalk.

Return to hotel – 4:00 pm

\$40 per person (Includes box lunch)

WEDNESDAY - ISLAND ADVENTURE

We are off to Whidbey Island, our first ferry ride, and day of exploring the longest island in the contiguous United States. We will wander through small villages of Langley (noted for Northwest art and fashion), Coupeville, and view the Navy airbase near Oak Harbor. Our tour will take us over the beautiful Deception Pass Bridge and will stop at a spectacular rhododendron

garden where the Washington State Flower should be in full bloom. Our return trip will be a scenic drive through the Skagit Valley with views of the Cascade Mountains.

Return to Hotel – 4:00 pm

\$40 per person (Includes bus, ferry, snacks)

AASHTO 2001 GOLF TOURNAMENT REGISTRATION FORM

LOCATION: Lake Wilderness Golf Course

DATE: May 20, 2001

TIMES: Shotgun Start - at Noon

COST: \$60 per person (Includes Lunch, Transportation, & Prizes)

FORMAT: Captain's Choice

- Prizes will be awarded at the Golf Course.
- More information will be mailed out later.
- If you intend to play in the tournament, please complete this form and return to:

Mr. Ed Power
c/o HDR Engineering
Twin Oaks I
5700 Lake Wright Drive
Suite 300
Norfolk, Virginia 23502

(757) 222-1500, FAX (757) 222-1515

E-mail: epower@hdrinc.com

Yes, I will play!

Handicap

Name

Company

Address

Phone

FAX

Teaming Request

NOTE: Payment is to be included in your check to AASHTO BRIDGE 2001.
Do not send payment to Mr. Power.

2001 AASHTO SUBCOMMITTEE ON BRIDGES AND STRUCTURES REGISTRATION FORM

MAY 20 - 24 • SEATTLE, WASHINGTON

Full Name	Badge Name	
Title	Organization	
Mailing Address		
City/State/Zip+4		
Telephone	Fax	E-mail
Spouse/Guest (First & Last name)		

EVENT	NO. ATTENDING	COST	SUBTOTAL
Registration fee by 4/15	_____	\$170	\$ _____
Registration fee after 4/15	_____	\$200	\$ _____
Registration fee spouse/guest	_____	No Charge	xxxxxx
Sunday Icebreaker	_____	No Charge	xxxxxx
Sunday Golf	_____	\$ 60	\$ _____
Sunday Mariner's Game	_____	No Charge for Transportation	
WEDNESDAY NIGHT BANQUET			
Registrant	_____	No Charge	xxxxxx
Guest/Child (10 & over)	_____	@ \$50	\$ _____
Number Vegetarian Meals*	_____	<i>(See bottom of page)</i>	
SPOUSE/COMPANION TOURS (LIMITED SPACE - REGISTRATIONS DUE BY APRIL 15)			
Monday – Emerald City Day	_____	@ \$50	\$ _____
Tuesday – Northwest Sampler	_____	@ \$40	\$ _____
Wednesday – Island Adventure	_____	@ \$40	\$ _____
Special Friday Bridge Tour <i>(Limited to 75 - Details on page 3)</i>	_____	@ \$40	\$ _____
Total Fees Enclosed:			\$ _____

NO REFUNDS

Exception: Boat trip payments will be refunded for those that do not make the capacity cutoff.

PAYMENT

Please make check or money order (no POs or credit cards, please) payable to:

AASHTO BRIDGE - 2001 (Federal ID #91-2061491)
 Jean Canfield
 Post Office Box 135
 Olympia, WA 98507-0135
 Phone 360 - 943-7732 FAX 360 - 357-9607

* Please indicate any special meal needs (i.e., low salt, vegetarian, etc.) or special services in order to have full and equal enjoyment of the conference: _____