

HEIGHT MOD PARTNER MEETING 2014 – FINAL REPORT

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OVERVIEW

The National Height Modernization Partner meeting provided a valuable opportunity for state and university partners to exchange best practices, leverage resources, and receive updated information about National Geodetic Survey products and services. Representatives from state agencies or universities interested in advancing the National Height Modernization Program and implementing "Height Mod" on a state or local level were invited to attend. Many past participants have received grant funding from NOAA's National Geodetic Survey (NGS), but other states and organizations participated in the 2014 partner meeting.

The meeting was organized as a series of sessions over the course of one and a half days. States provided updates on the progress and challenges implementing their local programs, and NGS provided updates regarding its planned transition to new geometric and geopotential datums in 2022. Other complementary sessions focused on socio-economic studies, the role of heights in emergency response, and programmatic updates from other federal agencies. The presentations from these sessions are listed below and also available online and organized by session.

Session	Title	Presenter	Organization
Session 1: Height Mod state and regional activities, Part 1	Great Lakes Region Height Modernization	Diane Arendt, Geodesist	Wisconsin Department of Transportation
	Illinois Height Modernization	Sheena Beaverson, Program Manager	Illinois State Geological Survey
	Minnesota Height Modernization	Rick Morey	Minnesota Department of Transportation
	Michigan Height Modernization	Shawn Roy	Michigan Department of Transportation
	Wisconsin Height Modernization	Diane Arendt, Geodesist	Wisconsin Department of Transportation
Session 2: Height Mod state and regional activities, Part 2	Delaware Height Modernization	Drexel Siok, Environmental Scientist	Delaware Department of Natural Resources and Environmental Control
	Connecticut Height Modernization	Dr. Thomas Meyer, Associate Professor	University of Connecticut
	South Carolina Height Modernization	Matt Wellslager, Chief	South Carolina Geodetic Survey
	North Carolina Height Modernization	Gary Thompson, Chief	North Carolina Geodetic Survey
	Florida Height Modernization	Scott Harper, Survey and Mapping Specialist	Florida Department of Transportation
	Western Region Height Modernization	Val Schultz, Reviewer/Surveyor	Weber County, Utah
Session 3: Heights in emergency response and disaster preparedness	Remote Sensing and emergency response	Mike Aslaksen, Remote Sensing Division Chief	NGS
	Advances in GPS and Imagery Differencing for Observing Vertical Changes and for Restoration of Geodetic Infrastructure After Major Earthquakes	Dr. Kenneth Hudnut, Geophysicist	U.S. Geological Survey Earthquake Science Center

Session	Title	Presenter	Organization
Session 4: Leveraging Height Modernization activities and benefits	Socio-economic studies	Brett Howe, Geodetic Services Division Chief	NGS
Session 5: Height Mod state and regional activities, Part 3	Colorado Height Modernization	Jonathan Kobylarz, Height Team Chairman	Colorado Department of Transportation
	Mississippi Height Modernization	David Mooneyhan, Director	Mississippi Spatial Reference Center
	Texas Height Modernization	Dr. Gary Jeffress, Professor	Texas A&M University Corpus Christi
	Louisiana Height Modernization	Dr. Joshua Kent, GIS Manager	Louisiana State University Center for GeoInformatics
Session 6: Planning for new datums	New geometric datum	Joe Evjen, Geometric Datum Project Manager	NGS
	New geopotential datum	Mark Eckl, Geopotential Datum Project Manager	NGS
	Gravity for the Redefinition of the American Vertical Datum (GRAV-D)	Dr. Vicki Childers, GRAV-D Project Manager	NGS
Session 7: Height Modernization activities	Recent and Upcoming Height Modernization activities	Christine Gallagher, Height Modernization Coordinator	NGS
Session 8: Related Federal efforts	USACE Comprehensive Evaluation of Project Datums (CEPD)	David Robar, Geomatics Chief	U.S. Army Corps of Engineers
	FEMA Map Modernization and Flood Insurance Program	Paul Rooney, Mapping Technology Specialist	Federal Emergency Management Agency

ATTENDEES' AFFILIATION

There was strong attendance from NGS and external partners. See the tables below for more information about what organizations attended the meeting in-person and remotely.

Organization	in-person	remote	Total
National Geodetic Survey	10	23	33

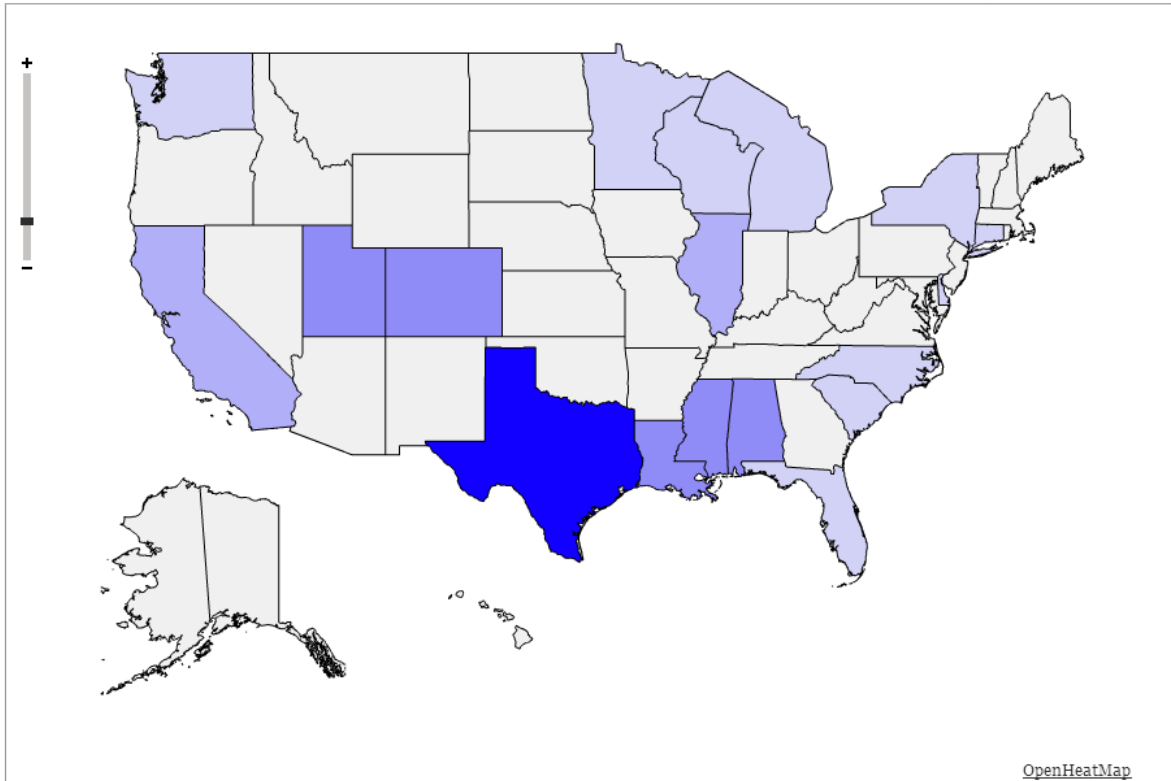
Organization	in-person	remote	Total
California Spatial Reference Center	1		1
David Evans and Associates	1		1
Harris Galveston Subsidence District	1		1
Illinois State Geological Survey	2		2
Michigan Dept. of Transportation	1		1
Mississippi Spatial Reference Center	1		1
North Carolina Geodetic Survey	1		1
Texas A&M University-Corpus Christi	4		4
Western Region Height Modernization Consortium	1		1
Alabama Dept. of Transportation	1		1
Colorado Dept. of Transportation	1	2	3
Delaware Dept. of Natural Resources		1	1
Federal Emergency Management Agency		1	1
Florida Dept. of Transportation	1		1
Louisiana State Univ. Center for GeoInformatics	1	2	3
Minnesota Depart of Transportation		1	1
NOAA/NESDIS/NGDC		1	1
New York Depart of Transportation		1	1
South Carolina Geodetic Survey	1		1
University of Connecticut		1	1
U.S. Army Corps of Engineers	1		1
U.S. Geological Survey	1	1	2
Utah Dept. of Transportation		2	2
Washington Dept. of Natural Resources		1	1
Wisconsin Dept. of Transportation	1		1
Alabama Dept. of Economic and Community Affairs		1	1
Grand Total	21	15	36

ATTENDEES' GEOGRAPHIC DISTRIBUTION

The map below shows the location of partners, both in-person and remote attendees. NOAA and NGS attendees were excluded, but other federal attendees were included. There was strong representation from around the country, especially among states who previously received Height Modernization grant funding.

HMOD Partner Heat Map

OPENHEATMAP



Count 1.00 3.00 5.00

ATTENDEES' FEEDBACK

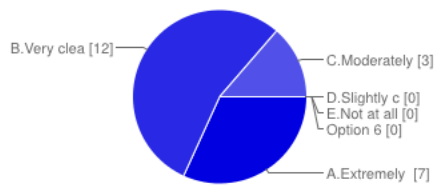
Evaluations from in-person attendees showed that the conference was valuable to its participants, and NGS intends to continue leading annual partner meetings in the future.

22 responses

[View all responses](#) [Publish analytics](#)

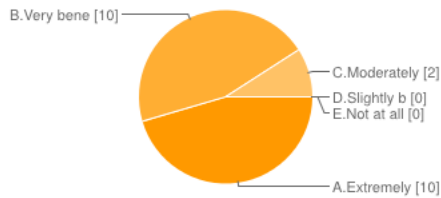
Summary

1. How clear were the objectives of the event?



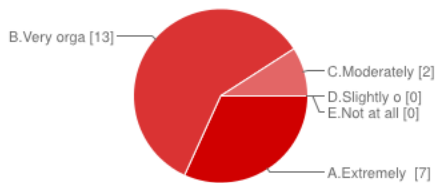
A. Extremely clear	7	32%
B. Very clear	12	55%
C. Moderately clear	3	14%
D. Slightly clear	0	0%
E. Not at all clear	0	0%
Option 6	0	0%

2. How beneficial was the information presented at the workshop?



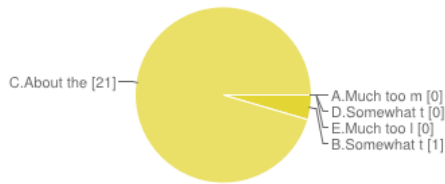
A. Extremely beneficial	10	45%
B. Very beneficial	10	45%
C. Moderately beneficial	2	9%
D. Slightly beneficial	0	0%
E. Not at all beneficial	0	0%

3. How organized was the information presented at the event?



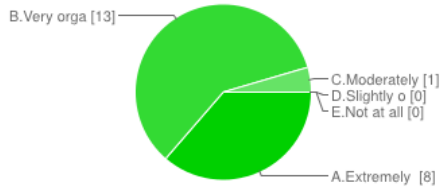
A. Extremely organized	7	32%
B. Very organized	13	59%
C. Moderately organized	2	9%
D. Slightly organized	0	0%
E. Not at all organized	0	0%

4. Was there too much technical information, too little, or about the right amount of information covered?



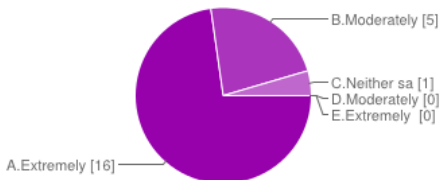
A. Much too much	0	0%
B. Somewhat too much	1	5%
C. About the right amount	21	95%
D. Somewhat too little	0	0%
E. Much too little	0	0%

5. How organized was the event?



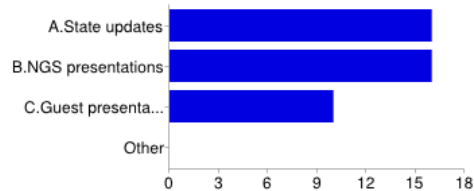
A. Extremely organized	8	36%
B. Very organized	13	59%
C. Moderately organized	1	5%
D. Slightly organized	0	0%
E. Not at all organized	0	0%

6. Overall, were you satisfied with the workshop, neither satisfied nor dissatisfied with it, or dissatisfied with it?



A. Extremely satisfied	16	73%
B. Moderately satisfied	5	23%
C. Neither satisfied nor dissatisfied	1	5%
D. Moderately dissatisfied	0	0%
E. Extremely dissatisfied	0	0%

7. What sessions did you find most useful?



A. State updates	16	38%
B. NGS presentations	16	38%
C. Guest presentations from other Federal agencies	10	24%
Other	0	0%

8. Do you have any other questions, comments, or suggestions?

NGS needs a procedure for connecting CORS ARP to NAVD 88 elevations. All sessions equally useful. Discourage remote presentations Thank you for a great meeting Solid chances for funding in the absence of federal funding Very well done, but I wanted roast beef. Outreach and education is important. Training and products will be needed with the new adjustment. Use of social media is a great plan for this. Access to the presentations, specifically those from NGS, will be useful for continued outreach to the state level. Was looking for some info on the direction of the CORS and how its future is changing. The teleconferences with Neil are sometimes limited and geared towards groups just starting out. Well done! Really enjoyed all aspects of the meeting, except the weather! Schedule remote presenters after breaks to avoid downtime / stressfull handovers. Create breakouts to focus groups into areas of interest, solve problems. Need NGS-USACE discussion about OPUS-DB -used correctly? -user friendly? Great benefit to see how states/others (one other than NGS) are moving ahead in all the various ways (Height Mod efforts). time for open discussions between state groups location that minimizes all presentations to facilitate discussions with NGS

Poll results from the webinar audience. More polls were drafted, but we failed to share them with the audience live.

1. Have you attended a Height Mod partner meeting before?

- | | |
|-------------------|---|
| a. Yes, in-person | 5 |
| b. Yes, remotely | 4 |
| c. No | 6 |

2. Rate your satisfaction with day 1 morning:

- | | |
|---------------------------------------|---|
| a. Extremely satisfied | 4 |
| b. Moderately satisfied | 7 |
| c. Neither satisfied nor dissatisfied | 1 |

6. Rate your satisfaction with the day 2 morning session:

- | | |
|---------------------------------------|---|
| a. Extremely satisfied | 5 |
| b. Moderately satisfied | 7 |
| c. Neither satisfied nor dissatisfied | 2 |