

Office of the Assistant Secretary for Research and Technology (OST-R)

Status Report:

University Transportation Centers (UTC) Program

FHWA RTCC
~~Briefing to Senate Committee Staff~~

December 17

~~October 15~~, 2020



UTC Program: Current Grants

- DOT's University Transportation Centers (UTC) Program was reauthorized in the FAST Act (PL 114-94; Dec. 4, 2015) for FY 16 – 20
- All grant selections have been made on an open and competitive basis, using the program guidance given by Congress in the FAST Act (49 USC 5505)
 - 2016 Competition – FAST Act Centers (funded by the Highway Trust Fund)
 - National UTCs (5)
 - Regional UTCs (7)
 - Tier I UTCs (20)
 - 2017 Re-Competition – Region 1, 2, 3 Centers (HTF)
 - Regional UTCs (3)
 - 2018 Competition – FY18 Appropriations (funded by the General Fund)
 - National UTCs (2): Infrastructure, Congestion
 - \$15M one-time appropriation; phased over 30 -36 months
 - 2020 Competition – FY20 Appropriations (funded by the General Fund)
 - Tier 1 UTCs (4)
 - \$5M one-time appropriation; one-time “project” grants, phased over 18 – 24 months
- All grant funding received through FY 20 (HTF and GF) has been awarded; no carryover funding available

UTC Program: 2020 Competition Results

- The FY20 Appropriations Act funded four Tier I UTCs
- NOFO opened March 30, 2020; selections announced July 31, 2020
 - Proposals for “project” topics due to limited funding and period of performance
 - These grants unique in that proposers responded to specific research needs statements about issues that are critical to the Department
 - Received **67** applications for **four** grants
- Research themes and selected grantees/consortia:

Theme	Award	Lead Grantee	Consortia Members
Highly Automated Transportation Systems Research	\$1.925 M	Ohio State Univ.	Univ. of California, Irvine; Univ. of Texas, Austin; Univ. of Cincinnati
Communications Technology and E-Commerce Effects on Travel Demand	\$1.0 M	Northwestern Univ.	Univ. of California; Univ. of Texas, Austin
Implications of Accessible Automated Vehicles and Mobility Services for People with Disabilities	\$1.0 M	Univ. of Pittsburgh	Uniformed Services Univ. of Health Sciences; Catholic Univ. of America
Strategic Implications of Changing Public Transportation Travel Trends	\$1.0 M	Georgia Institute of Technology	Univ. of Tennessee; Univ. of Kentucky; Brigham Young Univ.

UTC Program: Total Current Grantees



UTC Type	N of UTCs	Total Funding per UTC, FFY 16 - 20
National – HTF	5	\$14,133,900
National – GF	2	\$7,387,500
Regional	10	\$13,000,900
Tier 1 – HTF	20	\$7,067,100
Tier 1 – GF	4	\$1.0 – 1.925 M

[Much more at:
https://www.transportation.gov/content/
university-transportation-centers](https://www.transportation.gov/content/university-transportation-centers)

Increasing Engagement with UTC Grantees

- Actively bringing UTC knowledge to the attention of USDOT professionals and keeping UTCs aware of USDOT needs and priorities
- Deputy Assistant Secretary visits, pre-COVID; engaged in new grant kick-offs
- Engagement of UTCs in USDOT events:
 - Accessibility Summit Innovation Showcase
 - Consumer Electronics Show (CES)
 - South by Southwest (SXSW; cancelled)
 - Artificial Intelligence Webinars for USDOT (3 speakers)
 - USDOT Web Guide and dissemination program for UTC webinars
- COVID and limited administrative resources have hampered more active engagement
- Annual Summer and Winter program meetings continue in virtual format
- The Annual Report to Congress is in clearance and expect will be delivered by its February due date
 - Research and partnership success stories from each UTC
 - Focus on technology transfer

UTC Webinars: Register Now!

UTC Webinars: Register Now! | U.S. Department of Transportation

transportation.gov/content/utc-webinars-register-now

An official website of the United States government [Here's how you know](#)

The latest general information on the Coronavirus Disease 2019 (COVID-19) is available on [Coronavirus.gov](#). For USDOT specific COVID-19 resources, [please visit our page](#).

U.S. Department of Transportation

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Upcoming UTC Webinars

UTC Spotlight Newsletters

UTC Spotlight Conference Archive

UTC Webinars: Register Now!



7:58 PM
10/14/2020

Greetings, everyone –

We have a wonderful variety of new University Transportation Centers (UTC) webinars coming up in the next couple of months, including but not limited to:

- Strategies for Mitigating Congestion in Small Urban and Rural Areas
https://ufl.zoom.us/meeting/register/tJMuceqpqjgjHdw3VyDd3Ffm-2pv9_u7r3AF
- Bus Stops: Access and Equity <https://nitc.trec.pdx.edu/events/professional-development/webinar-11-10-2020>
- Deployment Partner Consortium Symposium, Traffic21/Mobility21 UTC Carnegie Mellon University <https://mobility21.cmu.edu/traffic21-deployment-consortium-rsvp/>
- Implications of COVID-19 on people and life during and after the pandemic: COVIDFUTURE Survey wave 1 and 2 Results https://asu.zoom.us/webinar/register/WN_-Rpy2-USRcW9DZvusA1faQ
- Artificial Intelligence-Powered Civil Engineer <https://inspire-utc.mst.edu/webinars/>
- Reducing Flammability for Bakken Crude Oil for Train Transport
<https://unl.zoom.us/meeting/register/tJcqd-ipqjosE9cd26JCh95CREb2mPEfUESL>

Visit the UTC webinar page today at <https://www.transportation.gov/content/utc-webinars-register-now> and see what's new.

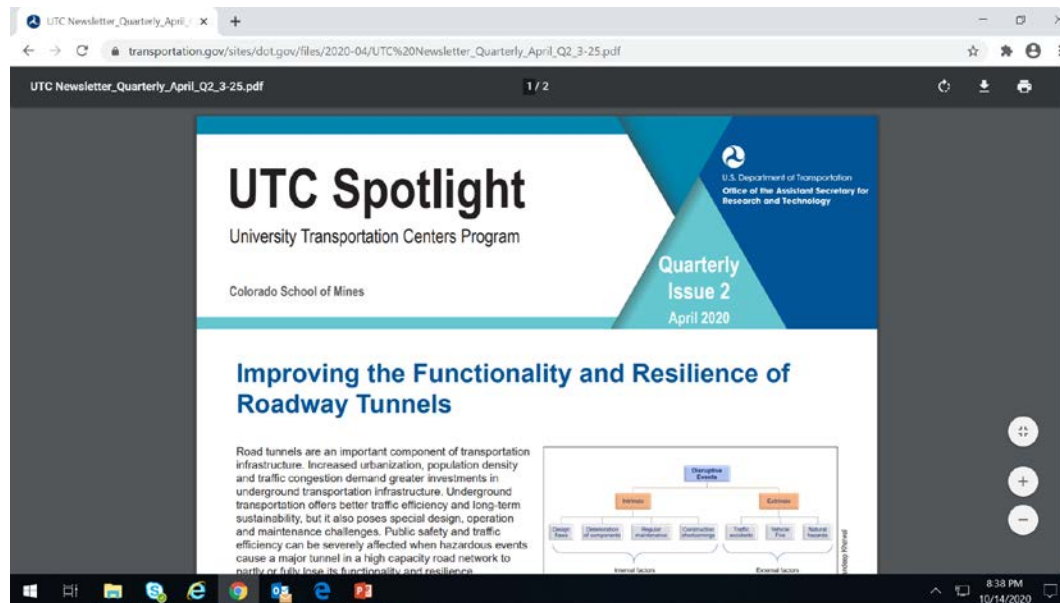
Miss something? Visit our You Tube channel to view past webinars at <https://www.youtube.com/playlist?list=PLSt7eXUli9wsUdSQjNI60rUQJMxszg68->.

UTC Program: Administrative and Strategic Issues

- Unprecedented Rate of Change
 - Transportation and transportation research have been changing at an unprecedented pace as factors such as the rapid evolution of technology and increasing connectivity have dramatically impacted transportation
 - USDOT has been seeking to keep research initiatives targeted on priority research needs, and making sure the research results are produced and disseminated in a timely manner, so this new knowledge can be put to work to improve transportation
 - Towards that end, the recent Tier 1 competition with prescribed research needs statements (vs. broad themes) has been well-received.
 - To further complement the connections between the researchers and USDOT we have added a technical point of contact for each of the new Tier 1 UTCs
 - These technical points of contact will ensure that UTCs are aware of US DOT priorities and apprised of related research that could be relevant; and can help ensure that US DOT can leverage this research, and that it does not duplicate other initiatives
 - In this era of rapid change it is important that we strengthen routine information/ knowledge exchange between UTCs and US DOT

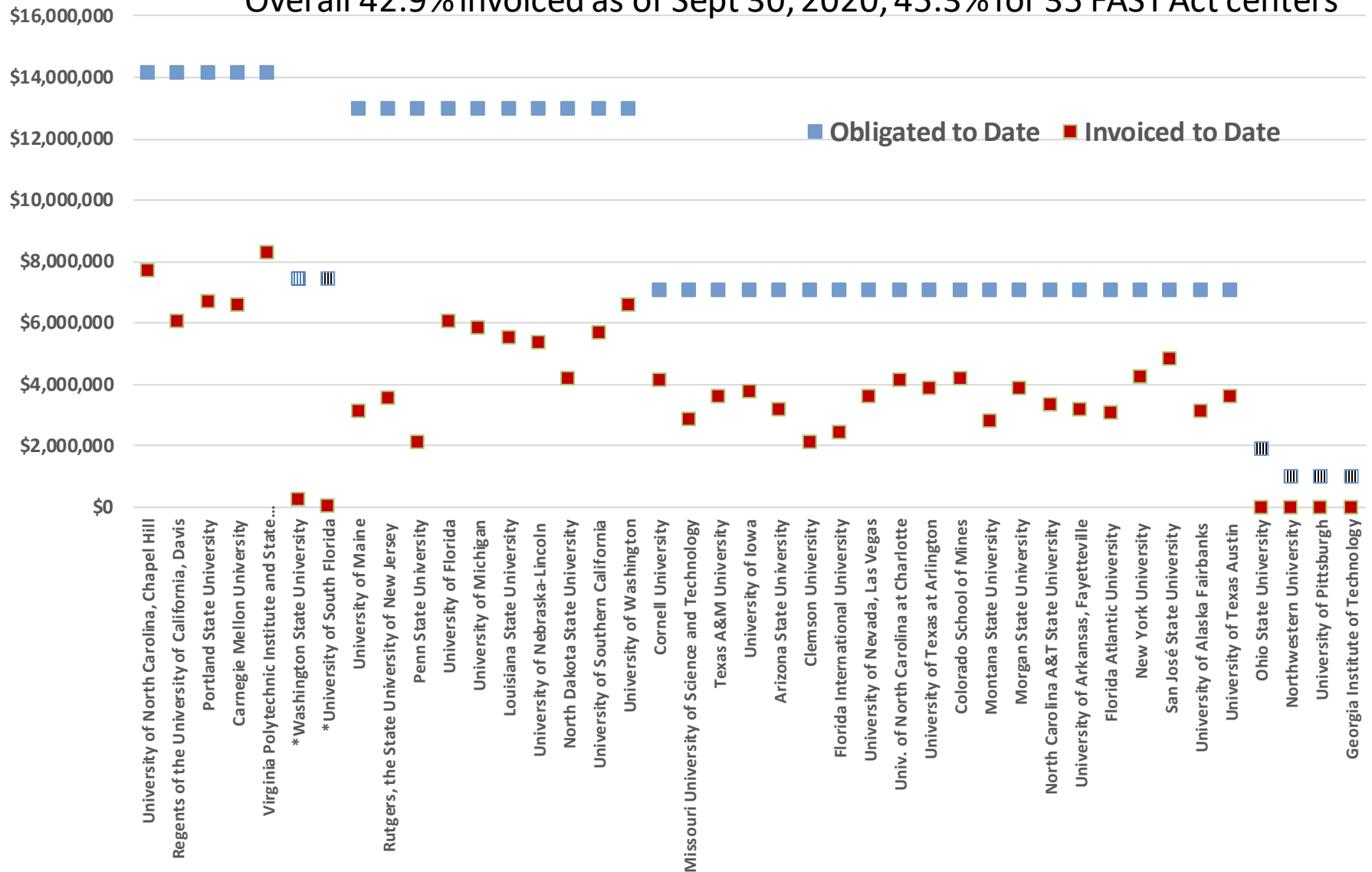
UTC Program: Administrative and Strategic Issues (2)

- Multiple Other University Opportunities
 - Important to note that UTC program is only one of many ways that universities are engaged in USDOT research, all requiring coordination
 - There are several modal programs for university research – FAA, PHMSA, FRA
 - Universities also receive funding through participation in research and other grants and contracts not limited to university participants – FAA, FHWA, FMCSA, FTA, NHTSA, MARAD
 - Indirect support through Transportation Research Board (TRB) research programs – NCHRP, TCRP, ACRP



FAST Act and Appropriations UTCs, 2016-2020

Overall 42.9% invoiced as of Sept 30, 2020, 45.3% for 35 FAST Act centers



FY21: Competitions or Continuations?

- **FAST Act One-Year Authorization Extension**
 - As written, the UTC Program is planning to extend the 35 Highway Trust Fund-funded UTCs for one year.
 - Funded in FY21 at FY20 levels
 - DOT will continue to engage with UTCs to inform them of immediate research needs that could be conducted this year
 - In order for there to be a competition for this one year of funding, Congress must pass legislation authorizing a competition
 - Should surface transportation reauthorization be accomplished in FY21, expect to conduct a new HTF-funding competition in FY22.
- **FY21 Continuing Resolution/ Annual Appropriations**
 - Guidance needed from Congress in FY21 Appropriations Act (or a full year CR)
 - Possible results:
 - If continued at FY20 levels without change – program would receive \$5M
 - Requires authorization for new competition
 - If not continued at FY 20 levels – no competition for new UTCs in FY21
 - If determined to continue the six General Fund-funded UTCs selected competitively under past Appropriations acts (FY18/FY20) – would extend those grants, will need to determine how to divide funding provided across the grants

Status Report:
University Transportation Centers (UTC)
Program

Backup Slides



UTC Program: Grant Structure and Goals

- Each UTC is a consortium of two- and four-year colleges and universities (lead grantees and subgrantees) that form a unique center of transportation excellence on a specific research topic.
- Together, they advance U.S. technology and expertise in the many transportation disciplines through education, solutions-oriented research and technology transfer, and the exploration and sharing of cutting-edge ideas and approaches.
- Center Types:
 - National: focus on national transportation issues as identified by legislation; any federal region and may include consortium members that are not in the same Federal region as the lead institution.
 - Regional: focus on national transportation issues as identified by legislation; address regional needs.
 - Tier 1: focus on national transportation issues as identified by legislation; any region and may include consortium members that are not in the same Federal region as the grantee university.

UTC Program: HBCU/OMI Participation

- Current UTC Program guidance (49 USC 5505 (c)(4)(c))
 - “**Focused research.**—In awarding grants under this section, consideration shall be given to minority institutions, as defined by section 365 of the Higher Education Act of 1965 (20 U.S.C. 1067k), or consortia that include such institutions that have demonstrated an ability in transportation-related research.”
 - While this provision only applies to Tier 1 UTC competitions, USDOT chose to apply this consideration to all types of UTC competitions
- Results:
 - Lead Grantees (2)
 - Morgan State University (MD) – “Urban Mobility and Equity Center” (Tier 1)
 - North Carolina A&T University – “Center for Advanced Transportation Mobility” (Tier 1)
 - Consortia Subgrantees/Contractors (9)
 - Benedict College (SC)
 - Central State University (OH)
 - Hampton University
 - Howard University
 - Jackson State University
 - Lincoln University (PA)
 - Prairie View A&M University
 - South Carolina State University
 - Texas Southern University

National and Regional UTCs

UTC Type	University	Research Priority	Total Funding FFY 16-20
National	University of California, Davis	Preserving the Environment	14,133,900
National	University of North Carolina	Promoting Safety	14,133,900
National	Portland State University	Improving Mobility of People and Goods	14,133,900
National	Carnegie Mellon University	Improving Mobility of People and Goods	14,133,900
National	Virginia Polytechnic Institute and State University	Promoting Safety	14,133,900
National-GF	University of South Florida	Reducing Congestion	7,387,500
National-GF	Washington State University	Improving Durability and Extending the Life of Transportation Infrastructure	7,387,500
Region 1	University of Maine	Improving Durability and Extending the Life of Transportation Infrastructure	13,000,900
Region 2	Rutgers, State University of New Jersey	Improving Durability and Extending the Life of Transportation Infrastructure	13,000,900
Region 3	Pennsylvania State University	Improving Durability and Extending the Life of Transportation Infrastructure	13,000,900
Region 4	University of Florida	Reducing Congestion	13,000,900
Region 5	University of Michigan	Promoting Safety	13,000,900
Region 6	Louisiana State University	Improving Durability and Extending the Life of Transportation Infrastructure	13,000,900
Region 7	University of Nebraska, Lincoln	Promoting Safety	13,000,900
Region 8	North Dakota State University	Preserving the Existing Transportation System	13,000,900
Region 9	University of Southern California	Improving Mobility of People and Goods	13,000,900
Region 10	University of Washington	Improving Mobility of People and Goods	13,000,900

Tier 1 UTCs

UTC Type	University	Research Priority	Total Funding FFY 16-20
Tier 1	University of Alaska Fairbanks	Promoting Safety	7,067,100
Tier 1	University of Arkansas	Preserving the Existing Transportation System	7,067,100
Tier 1	Arizona State University	Improving Mobility of People and Goods	7,067,100
Tier 1	San José State University	Improving Mobility of People and Goods	7,067,100
Tier 1	Colorado School of Mines	Improving Durability and Extending the Life of Transportation Infrastructure	7,067,100
Tier 1	Florida Atlantic University	Improving Mobility of People and Goods	7,067,100
Tier 1	Florida International University	Improving Durability and Extending the Life of Transportation Infrastructure	7,067,100
Tier 1	University of Iowa	Promoting Safety	7,067,100
Tier 1	Morgan State University	Improving Mobility of People and Goods	7,067,100
Tier 1	Missouri University of Science & Technology	Preserving the Existing Transportation System	7,067,100
Tier 1	Montana State University	Improving Mobility of People and Goods	7,067,100
Tier 1	University of North Carolina at Charlotte	Improving Mobility of People and Goods	7,067,100
Tier 1	North Carolina A&T University	Improving Mobility of People and Goods	7,067,100
Tier 1	University of Nevada, Las Vegas	Improving Durability and Extending the Life of Transportation Infrastructure	7,067,100
Tier 1	New York University	Improving Mobility of People and Goods	7,067,100
Tier 1	Cornell University	Preserving the Environment	7,067,100
Tier 1	Clemson University	Improving Mobility of People and Goods	7,067,100
Tier 1	University of Texas at Austin	Improving Mobility of People and Goods	7,067,100
Tier 1	University of Texas at Arlington	Preserving the Existing Transportation System	7,067,100
Tier 1	Texas A&M Transportation Institute	Preserving the Environment	7,067,100
Tier 1-GF	Georgia Institute of Technology	Improving Mobility of People and Goods	1,000,000
Tier 1-GF	Northwestern University	Improving Mobility of People and Goods	1,000,000
Tier 1-GF	Ohio State University	Promoting Safety	1,925,000
Tier 1-GF	University of Pittsburgh	Improving Mobility of People and Goods	1,000,000