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Susan Cochran Telephone: (510) 987-0887 Email: susan.cochran@ucop.edu Chair of the Assembly of the Academic Senate Faculty Representative to the Regents University of California

June 2, 2023

# THERESA MALDONADO, VICE PRESIDENT RESEARCH AND INNOVATION

# **Re:** Five-Year Review of the UC Institute of Transportation Studies Multicampus Research Unit

Dear Theresa:

At its May 24, 2023 meeting, the Academic Council approved the attached five-year review report of the UC Institute of Transportation Studies (ITS) Multicampus Research Unit (MRU). Following procedures outlined in the Compendium, the review was performed by a joint Senate review committee, led by the University Committee on Research Policy (UCORP) with input from the University Committee on Planning and Budget (UCPB) and the Coordinating Committee on Graduate Affairs (CCGA). We request that you forward the report to the ITS director.

The review committee's report affirms the unique service the ITS provides to advance UC's mission for research, graduate education, and public service, and recommends continuing the MRU for another five years. The report also offers suggestions for enhancing ITS operations and governance with leadership that will benefit from including more diversity of thought and vision, and for strengthening multicampus collaborations both within the existing four campus branches of the ITS and by extending the reach of the ITS beyond Berkeley, Los Angeles, Irvine, and Davis.

The Academic Council appreciates the significant time and effort the review committee spent in preparing and writing this report. In particular, I want to recognize the substantial contributions and outstanding leadership of UCORP Chair Cynthia Schumann.

Sincerely,

Susan Cochran, Chair Academic Council

Cc: UCORP Academic Council Campus Senate Executive Directors Executive Director Lin

Encl.

# UNIVERSITY OF CALIFORNIA, ACADEMIC SENATE

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UNIVERSITY COMMITTEE ON RESEARCH POLICY (UCORP) Cynthia Schumann, Chair Email: cschumann@ucdavis.edu University of California Academic Senate 1111 Franklin Street, 12th Fl. Oakland, California 94607

May 17, 2023

SUSAN COCHRAN CHAIR, ACADEMIC COUNCIL

#### **RE: Five-Year MRU Reviews of the Institute of Transportation Studies and UC MEXUS**

Dear Susan,

I am submitting to the Academic Council the reports from the two five-year MRU reviews that were conducted this year. The UC Institute of Transportation Studies (ITS) and UC MEXUS were reviewed as specified by the Compendium, with UCORP as the lead committee and with the participation of members of UCPB and CCGA, who consulted with their respective committees. (Note that ITS did not have a liaison from UCPB.) The five-year review is meant to assess the unit's activities with regard to its stated purpose, present functioning, funding record, future plans, and continuing development to meet the needs in the field.

UCORP would like to thank Kathleen Erwin and Anna Ward from the Research Grants Program Office for their support leading up to and during the reviews.

Sincerely,

Cynthia Schumann Chair, University Committee on Research Policy

Enclosures:

Review of the Institute of Transportation Studies (May 17, 2023) Review of UC MEXUS (May 17, 2023)

## UC Institute of Transportation Studies (ITS) Five-Year Review

Conducted on behalf of the Academic Senate by the University Committee on Research Policy (UCORP), with input from the Coordinating Committee on Graduate Affairs (CCGA)

May 17, 2023

#### **OVERALL IMPRESSION**

The UC Institute of Transportation Studies (ITS) was established as a cooperation of UC Berkeley and UCLA in 1947. UC Irvine joined in 1974, and UC Davis in 1991. This review covers 2017-2022. Funded by the state and by research grants, UC ITS provides infrastructure for research in transportation, facilitates education, and launches research initiatives. It provides information to policymakers and public agency stakeholders seeking information about completed and in-progress transportation-related research.

Over its history it has established itself as a focal point of research with worldwide impact that has been instrumental in defining transportation policy and guiding transformations in technology and infrastructure.

ITS provides an important service from UC to the state of California via: i) individual research efforts; ii) synergistic infrastructure for high visibility, and iii) funding competitiveness. The Institute's funding comes largely from the state, and is primarily separate from other UC funding. The MRU is an example to the legislature, and other such entities, of the extensive impact of UC research on California.

#### MAJOR ACHIEVEMENTS AND SIGNIFICANT CONTRIBUTIONS

#### Strengths

- Internationally recognized and a prime example of UC research impacting California's policy decisions.
- Engages a large number of graduate students and postdocs with high throughput.
- Significant publication record, although difficult to judge what is directly due to the MRU rather than individual participants.
- Offers excellent evidence for the coupling of the research & education mission of the UC.
- Diverse research & practical training portfolio.
- Wide engagement with government and policy makers provides opportunity to put research into practice.
- Impressive range of reports and briefings to academic and governmental audiences.

#### Weaknesses

 Appears to function mostly as a vehicle for disbursing State funds to campus branches. Multicampus collaborations are rare and it is unclear that proposals submitted to STRP – one of its current programs – require or emphasize multicampus collaboration. RIMI appears to be oriented to greater multi-campus collaboration. The pandemic may have delayed much progress on this front.

- Focus appears to be on providing funding to the current campuses with only token funding efforts toward additional campuses.
- No evidence that ITS serves as a multiplier for extramural funds from federal or private sources.

#### MULTI-CAMPUS OPERATIONS

#### Strengths

- Very successful at making sure that State and other funds are allocated to projects based at ITS branch campuses and (to a lesser extent) non-ITS branch campuses.
- Successfully developed a robust feedback loop between research teams and government, as evidenced by the large number of reports and seminars.

#### Weaknesses

- As noted above, multi-campus collaborations are rare. Each campus primarily operates independently.
- Not clear that ITS has managed to break down the natural barriers to multi-campus collaboration or has provided much stimulus for extramural funding from Federal or private entities.
- There is an effort to involve other campuses, but it could be strengthened. Ways to achieve that could include expanding the involvement of other campuses in RFPs and in the governance.

#### FUTURE GOALS

#### Strengths

• The recent addition of the RIMI initiative is promising. There is an appropriate focus on executing that and developing its phase 2 program.

#### Weaknesses

• A long-term strategic vision was not clearly stated. ITS has engaged consultants to assist with strategic planning. Clear statements of the strategic vision would help with guiding that planning.

#### BUDGET

#### Strengths

- ITS has been successful in garnering non-UC funds and will likely continue to be successful without UC specific funding assistance.
- Steady stream of funding from state budget. As part of SB1 (Road Repair and Accountability Act of 2017), ITS receives \$5 million per year.
- In 2021, ITS received a one-time \$10 million allocation for its Resilient and Innovative Mobility Initiative (RIMI).
- The unit has efficient administrative overhead.

#### Weaknesses

- Operates a model of delivering specific policy materials to state government in exchange for a budget which is then redistributed to various researchers and students.
- Appears to be a pass-through of funds from the state budget to various affiliated units.
- Unclear independent direction, nor attempt to use funding to guide specific directions
- Lack of attempt at diversifying the funding stream or secure outside funding

### ADMINISTRATION AND GOVERNANCE

#### Strengths

- ITS has been an enormously successful program. Because its primary function is to advise the legislature, it is less concerned with the implementation of the results of its own advanced research than with current legislative issues.
- Current leadership structure is eminently capable to fulfill its functions; however primarily operates independently at individual campuses.
- Established a Board of Advisors with impressive breadth that can help with the long-term vision. These and other steps undertaken to develop closer collaboration and integration of the individual units with each other are welcome and should be expanded.
- ITS has begun to expand the diversity of its leadership and staff, and is cognizant of the need to continue on that path. ITS has also made efforts toward diversity in its programs, including formation of the "UC ITS Transportation Equity Committee" representing leading equity scholars across the ITS branches.
- Recommendation to include community partners in funded research.

#### Weaknesses

- Leadership could use new ideas and engagement with a range of topics from global challenges due to climate change, and to undertake diversity and inclusion efforts, especially in leadership.
- Unclear if leadership structure is driven by a clear vision and set of strategic goals.

#### CONCLUSIONS AND RECOMMENDATIONS

UC ITS provides a unique and important service to UC in leveraging resources for transportation research and supporting graduate education. It also provides an important service to the state. Its continuance as an MRU is well justified. The primary areas of improvement would be looking for opportunities to expand involvement of other campuses and enhance the governance with elements of a strategic vision planning in addition to the current on-going funded projects.

ITS is a vital organization, although some of the landscape of research and research funding is different from the original structure and intent of the MRU. ITS has made an effort to address challenges in the current landscape, although <u>more diverse, visionary leadership is needed to extend the impact beyond</u> <u>existing, independent programs</u>. Additional efforts are needed to extend the resource commitment beyond the four main campuses, which would help justify the relatively large commitment of resources, broaden UC-wide participation, and expand the impact of research programs.