Scan of Promising Efforts to Broaden Faculty Reward Systems to Support Societally-Impactful Research

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Authors

Emily J. Ozer, Professor, School of Public Health and Faculty Liaison to EVCP (Provost) on Public Scholarship and Engagement, University of California-Berkeley

Jennifer Renick, Assistant Professor, Educational Psychology, University of Memphis

Bruce Jentleson, William Preston Few Distinguished Professor of Public Policy and Professor of Political Science, Duke University

Bemmy Maharramli, Director of Innovation in Landscape Management, EcoAgriculture Partners and former Associate Director of Strategic Initiatives, University of California-Los Angeles

Center for Community Engagement

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Executive Summary

In this scan, we provide an overview of promising attempts to reform and/or strengthen promotion and tenure (P&T) systems to reward the societal impact of research. For this project, societally-impactful research is defined broadly to encompass research, analysis, writing, and related activities that advance knowledge with an explicit priority of addressing policy or practice questions. This includes but is not limited to research conducted in partnership with policymakers or communities, sometimes referred to as "engaged research." We do not imply that traditional forms of investigator-driven, disciplinary-focused research do *not* have a societal impact. Rather, we assess that existing P&T criteria tend to focus on the *scholarly impact* of research and are not sufficiently sensitive to recognizing the societally-impactful outputs, outcomes, and applications of research and to valuing nontraditional forms of scholarship more explicitly designed for societal impact.

Building on the prior work of the <u>Transforming Evidence Funders Network</u> (TEFN) coalition including the <u>October 2022 conference</u>, this scan draws upon and analyzes insights from 13 universities and 10 organizations in the United States to illustrate diverse efforts to expand P&T systems and employ other innovations and strategies to better recognize societally-impactful research. These promising approaches and our recommendations to accelerate change fall broadly into three domains: (a) supporting faculty in generating and disseminating societally-impactful research; (b) motivating, reforming, and building capacity for internal and external university evaluation processes; and c) shaping the broader disciplinary and funding ecosystems to prioritize and support societally-impactful research. We further note the distinction between efforts that have *catalyzed innovations* and the kinds of sustained effort needed for *institutionalization* of changes in incentive structures and support systems.

Examples of promising approaches, which are explained in detail in the report, include:

- 1. Campus- and system-wide (i.e., in public university systems) reforms to faculty advancement guidelines, criteria, and language.
- 2. Formalized roles and review processes to build institutional capacity for *implementing* faculty advancement guidelines in university departments, schools, and colleges.
- 3. Capacity-building for faculty in developing P&T cases.
- 4. Funding supports to accommodate the time-intensive nature of partnered scholarship.
- 5. Infrastructure supports to streamline research pain points (e.g., Institutional Review Boards (IRBs), data-sharing, contracting) often encountered in partnered scholarship.
- 6. Building societally-impactful scholarship into institutional identity.
- 7. Graduate student and early career support and training for non-academic skill sets and career paths.
- 8. Strengthened cross-campus networks and programs to accelerate diffusion of innovations and impact.
- 9. External visibility for and incentivization of societally-impactful scholarship, such as by funders and publishers.
- 10. Major multi-component support for high-profile university-wide impact initiatives.

This scan revealed many promising approaches for advancing recognition of societally impactful scholarship and opportunities for funders to accelerate and sustain these efforts. Building on this

initial scan, we recommend further inquiry to unearth additional evidence regarding effective implementation of institutional change efforts, to develop measures for the impact of those efforts, and to explore contextually focused questions such as: (1) What are key organizational factors and processes (administrator- and/or faculty-driven) that are effective levers in catalyzing and sustaining innovations? (2) What is the role of peer university influence on internal change processes, and how can support for networking and communities of practice be leveraged most effectively? and (3) What are creative approaches and best practices for evaluating the implementation and impact of innovations, considering the highly confidential nature of faculty evaluation processes?

While university institutional context and culture shape the particulars, we see five main types of funding efforts for funders to consider:

- 1. **Awards for societally-impactful research** to provide resources for research generation, support its dissemination and application, and enhance the visibility, legibility, and prestige of such research in internal and external evaluation.
- 2. **Funding for institutional changemakers** to support faculty time, prioritization of effort, and capacity-building for organizational change and fundraising.
- 3. **Funding for systematic institutional change**, including resources for universities to create strategies and infrastructure to broaden and sustain changes in P&T policies and culture.
- 4. Drawing on funders' collective convening power to **support institutional cross-learning and organize networks** for leaders at multiple ecological levels of the university:
 - 1. Top university administrative leaders (chancellors, presidents, provosts) across campuses with potential or demonstrated interest in and support for societally-impactful scholarship.
 - 2. Mid-level faculty and staff leaders leading bottom-up change efforts.
 - 3. Cross-learning and collaboration to promote values, norms, and resource commitments that link and partner university leaders with faculty-driven efforts.
- 5. **Influencing the broader research ecosystem**, outside of universities, to (a) encourage more substantial investments aligned with societally-impactful scholarship, especially via cooperation and collaboration among funders, and (b) strengthen and uplift scholarly outlets for societally-impactful research.

Overall, we are encouraged by the extent and variety of initiatives underway to enhance recognition of societally-impactful scholarship. At the same time, we are realistic about the challenges posed by traditional higher education cultures and practices (e.g., P&T, IRBs, financial offices, etc.) being misaligned with societally-impactful scholarship. Our intent in this report is to name these challenges while providing a basis for building on momentum and the many opportunities to accelerate this work.

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Introduction and Scope

We aim to provide an overview of promising attempts to reform and/or strengthen promotion and tenure (P&T) systems to reward the societal impact of research, as well as to diversify the forms of scholarship that are legible, legitimate, and credited as scholarship within those systems. Terminology for such scholarship varies across fields: here, we primarily use the language of *societally-impactful research*, defined broadly to encompass research, analysis, writing, and related activities that advance knowledge with an explicit priority of addressing policy or practice questions. This includes, but is not limited to, research conducted in partnership with policymakers or communities, sometimes referred to as "community-engaged" or "engaged research," among other terms. Our use of the term "societally-impactful research" is not to imply that traditional forms of investigator-driven, disciplinary-focused research do *not* have a societal impact. Rather, it suggests that existing P&T criteria, particularly in research-intensive institutions, tend to focus heavily if not exclusively on the *scholarly impact* of research and are not sufficiently sensitive to societal impact and atypical forms of scholarship.

This issue is especially significant in its bearing on broader questions about the future of higher education. As vitally important institutions in society, universities are at their best when they create and advance knowledge both for its intrinsic value and when they put that knowledge in the service of society locally and globally. While this can entail targeted initiatives with roles for affiliated faculty with practitioner backgrounds, it can also be achieved by engaging and incentivizing tenure-line faculty to participate in publicly-facing research activities. As U.S. universities reckon with data that show rapidly declining public trust in higher education, societally-impactful scholarship may offer opportunities to build confidence in their research, teaching, and service missions and improve perceptions of their public value.

Our primary approaches for gathering information for this scan included: (a) interviews with key university personnel who are engaged in reform efforts; (b) review of university and professional organization reports, websites, and other artifacts; and (c) interviews with selected high-level staff of professional organizations working to strengthen tenure and promotion processes to recognize and reward societally-impactful scholarship.

In order to provide a wide scan of the current landscape, we sought a breadth of university types across geographic regions, including: R1 (the most research intensive doctoral-granting institutions per the Carnegie classification) and R2 universities; minority serving institutions (MSIs), such as Asian American and Native American Pacific Islander Serving Institutions (ANNAPISIs), Hispanic-Serving Institutions (HSIs) and Historically Black Colleges and Universities (HBCUs); Land-grant institutions; and private and public universities. Note: these characteristics are not mutually exclusive. A total of 13 university cases were included, one of which is the 10-campus University of California system. Interviewees included faculty, some of whom also currently or previously held administrative appointments, as well as university administrators and staff, with a total of 16 individuals contributing responses about their university, in addition to the authors of this report. A brief table outlining the universities included and interviewees represented can be found in Appendix A. While the scope of this timesensitive scan does not allow for comprehensive analysis of each institution or a thorough review of possible reform efforts, these illustrative cases highlight informative approaches to supporting

societally-impactful research, shaped by the characteristics of each institution and the vision and strategy of their leadership. Taken together, the cases provide a potential "menu" of adoptable and adaptable approaches. Professional organizations included in the scan include non-profits focused on supporting specific university types or regions, professional disciplinary and interdisciplinary associations, and cross-university initiatives convened with the goal of improving P&T systems. Interviewees from these organizations included directors, senior officers, faculty leaders, and other key staff, with a total of eleven contributors (see Appendix B).

This scan was commissioned by a working group of the <u>Transforming Evidence Funders</u> <u>Network</u> (TEFN) focused on broadening academic incentives to reward societally-impactful research. TEFN convenes funders who are driving change in the production, mobilization, and use of evidence across a range of issue areas and geographies.

Background

Societally impactful and community-engaged research provides key affordances and opportunities, both historically and in the current sociopolitical context. Engaged research can expand who is included in knowledge production (Stoecker, 2003), bridge the gap between research and practice (Balazs & Morello-Frosch, 2013), and leverage research to advance social justice (Tuck & Guishard, 2013). "Public scholarship" promotes similar goals by "generating, transmitting, applying, and preserving knowledge for the direct benefit of external audiences in ways that are consistent with University and unit missions" (Jentleson & Ratner, 2011). Some institutions have used terms including "public impact research" to encompass the diverse efforts to make university research benefit society. We use "societally-impactful research" as an umbrella term in this scan to reflect our interest in *assessing* faculty's contributions according to their societal, and not just scholarly, impact.

When being considered for reappointment, tenure, and promotion, faculty at U.S. universities are generally evaluated on their contributions to three core goals of the university: research, teaching, and service. Faculty evaluation processes differ across universities in terms of the specific steps leading to tenure and promotion and the relative power of departments versus the central campus, relative power of faculty versus administrators, and relative weighting of research, teaching, and service. At R1 universities (highest research output, according to the Carnegie classifications), while teaching and service are given some account, hiring, tenure, and promotion to Associate and Full Professorships are mostly based on disciplinary scholarship as measured by such metrics as citation counts, scholarly journal impact factors, and external review letters. Teaching-focused universities with lower research output may give more account to teaching and service, and some have added a community engagement plank to the traditional tripartite criteria. Despite this variability, the faculty evaluation process typically includes internal review (e.g., faculty P&T candidate submits a portfolio that is evaluated and voted on by colleagues, faculty committees, chairs, deans, and ultimately a campus provost) and external contributions to that review, including letters from leaders in the scholar's field and from "peer" universities to inform decisions. This integration of internal and external evaluation is critical for understanding the potential for funder investments to focus change efforts within institutions, across networks of institutions, and in the broader research ecosystem.

Notably, issues of inclusion in and application of research have risen in importance due to the COVID-19 pandemic and uprisings for racial justice, which highlighted the need for scholarship that attends to societal crises and includes diverse communities (Blanchard & Furco, 2021; Edwards et al., 2020; Staub & Maharramli, 2021). Women and scholars of color are also more likely to participate in community-engaged scholarship (Antonio, 2002; Baez, 2000; Vogelgesang et al., 2010), making it an important pathway to increase the recruitment and retention of diverse faculty. Engaged research can promote a sense of purpose and community for faculty, staff, and students both generally and for faculty of color in particular, which contrasts with the marginalization some may experience in predominantly white academic institutions (Baez, 2000; Diggs et al., 2009). However, such scholarship is often undervalued and undercounted in P&T and other faculty evaluation processes (Carter et al., 2021; Ellison & Eatman, 2008; Gamoran, 2022; Ozer et. al., 2021). Disciplinary and institutional cultures can struggle with recognizing the value of scholarship that draws on a faculty member's scholarly training and identity but does so with the intent of bringing that knowledge to bear on societal policies and practices, beyond academic audiences. This dynamic, combined with the timeintensive nature of engaged scholarship, can make participating in societally-impactful research risky for faculty, especially untenured faculty (Carter et al., 2021; Gamoran, 2022; Sdvizhkov et al., 2022). This poses significant challenges for faculty retention and promotion, as engaged scholars may not achieve tenure, may advance through the ranks more slowly, or may opt to leave the academy altogether if they do not feel they can do the kind of research they desire (Ellison & Eatman, 2008; Gamoran, 2022; Jayakumar et al., 2009; Ozer et al., 2021). While such scholars may find other venues for doing their work, universities are hurt by the loss of such dynamic human capital.

Fortunately, some higher education institutions are working to promote the visibility and valuing of engaged and public scholarship in faculty evaluation processes, such as Duke's recent report advocating for increased weight to be given to public scholarship or UC-Berkeley's new policy guidelines to advance recognition of engaged research as scholarship rather than service (Blanchard & Furco, 2021; Duke's Tenure Standards Committee Report, 2018; Ozer, et al. 2021). However, such efforts are still limited to certain institutions, with many early in their stages of implementation (see e.g., Blanchard & Furco, 2021; Ozer, et al. 2021). As more universities or colleges seek to adopt similar reforms, understanding the process behind these initiatives and lessons learned from their implementation is extremely valuable. Similarly, as funders and organizations seek to support such efforts, it is crucial to identify what challenges and opportunities exist to bring this work forward. How do these changes happen? Under what conditions are they most effective? How can they be spread and sustained in complex, multilevel institutions? Additionally, what practical challenges exist to implementing such changes, including questions of evaluation metrics and institutional capacity (Blanchard & Furco, 2021)?

Though there is still more work to do to fully answer these questions and understand how best to advance recognition of societally-impactful scholarship, this white paper offers a start. Drawing upon successful examples of institutional change work at diverse universities, we seek to answer a number of these questions for funders who are interested in supporting university reform efforts in this area.

University Cases

Overview of Innovations and Opportunities

Through interviews and desk research, we reviewed illustrative case examples from twelve universities and one state university system of strategies and change processes to broaden faculty reward systems. Based on our scan of the illustrative cases, we identified ten innovations that universities use to strengthen the production, visibility, and valuing of societally-impactful research, each illustrated by one or more university case examples.

- 1. Campus- and system-wide (i.e., in public university systems) reforms to faculty advancement guidelines, criteria, and language.
- 2. Formalized roles and review processes to build institutional capacity for *implementing* faculty advancement guidelines in university departments, schools, and colleges.
- 3. Capacity-building for faculty in developing P&T cases.
- 4. Funding supports to accommodate the time-intensive nature of partnered scholarship.
- 5. Infrastructure supports to streamline research pain points (e.g., Institutional Review Boards (IRBs), data-sharing, contracting) often encountered in partnered scholarship.
- 6. Building societally-impactful scholarship into institutional identity.
- 7. Graduate student and early career support and training for non-academic skill sets and career paths.
- 8. Strengthened cross-campus networks and programs to accelerate diffusion of innovations and impact.
- 9. External visibility for and incentivization of societally-impactful scholarship, such as by funders and publishers.
- 10. Major multi-component support for high-profile university-wide impact initiatives.

We note that campus context and identity play important roles in the motivation for and implementation of these innovations. We outline several key takeaways below through a brief discussion of each innovation type. These descriptions of the innovations are intentionally high-level, and do not necessarily reflect the depth of narrative included in a full accounting of the illustrative cases.

Campus and System-Wide Reforms to Faculty Advancement Guidelines

Several universities in our scan (e.g., Duke, University of California-Berkeley (UC-Berkeley), University of Minnesota-Twin Cities (UMN-Twin Cities), University of North Carolina at Greensboro (UNC Greensboro)) have revised university-wide policy guidelines to recognize the societal impact of research more explicitly. Some of these efforts, such as at Duke and UC-Berkeley, include adoption of language that broadens, clarifies, and makes visible the inclusion of public scholarship in the "research" category within P&T standards, rather than service. Such changes manifest greater intellectual pluralism, with a range of scholarship – both work produced primarily for a scholarly audience and work with a more public focus – accorded excellence. They entail a core set of central university standards that establish a baseline and framework for including public scholarship and engagement in P&T, while leaving to schools and departments the ability to tailor efforts with criteria and measurement appropriate to particular disciplinary and/or interdisciplinary configurations. Standards may provide guidelines

for external reviewers, such as clauses requesting that reviewers address a candidate's public scholarship, and/or including reviewers who themselves are tenured professors known for their public scholarship.

At UC-Berkeley, 2021 campus-wide policy guidelines for the evaluation of community-engaged research clarified the crediting of non-peer reviewed scholarly products (e.g., policy reports, white papers, testimony, computer apps) as research rather than as service; such products can be considered scholarly *publications* if they are disseminated beyond first-hand encounters with partners or policymakers. UMN-Twin Cities revised their P&T guidelines in 2006 to incorporate public engagement along with interdisciplinary work and diversity, equity, and inclusion efforts in evaluating faculty research, teaching, and service. In general, a frequent issue raised by interviewees about changes in guidelines and policies concerned metrics: societally-impactful scholarship does not have measures of excellence considered comparable to the citation counts and journal impact factors used to evaluate traditional academic scholarship. Universities have begun addressing this issue: for example, UMN-Twin Cities convened a campus-wide Public Engagement Metrics Committee to assess the scale and scope of the institution's public engagement activities. Organizational efforts such as the Modern Language Association's Programs also seek to improve and disseminate metrics for societally-impactful research.

New Formalized Roles and Review Processes to Build Institutional Capacity

While university-wide policy revisions offer a key foundation for recognition of societally-impactful scholarship, these policies must also be implemented in diverse campus departments. These efforts are made more complex by variations in what constitutes societally-impactful research and public engagement in different disciplines, and by variation in P&T policies based on departmental practices and disciplinary norms. Given the size and complexity of universities, it is not surprising that a common theme emerging from the scan is that more support is needed for implementation infrastructure and formalized roles to mobilize sustained institutional changes. While the diffusion and implementation of new guidelines across diverse departments remains challenging, some universities in the scan offered promising institutional capacity-building approaches via new roles and P&T review processes.

UMN-Twin Cities created a specialized review committee on community-engaged scholarship for those seeking tenure who have emphasized engaged research, which includes faculty across the University of Minnesota system. This optional process was partially informed by feedback from departments about P&T committees feeling ill-equipped to adequately assess the societal impact of this research. This review committee includes senior community-engaged scholars to whom junior faculty can submit their P&T materials for feedback; the committee then provides a letter to be included in their P&T case. To further support departments, the university also convened a community engagement liaisons group, which included associate deans charged with supporting engagement within their unit. The university also offers an Engaged Department Program, wherein a select group of department teams put together and implement a public engagement institutionalization action plan for their unit. Similarly, after UNC Greensboro revised its university P&T guidelines to better support societally-impactful research, enacting goals set forth in the university strategic plan to support community-engaged scholarship, the vice chancellor for research named a special assistant for community engagement to lead an

advisory committee of faculty, staff, students, and community partners to identify strategic investments to support engaged scholarship. One key activity was to ensure that faculty understood how to define and evaluate scholarship so the guidelines could be enacted across campus. This included engaging in what interviewee Dr. Emily Janke, Director of the Institute for Community and Economic Engagement, described as "a step wise process" to implementation, wherein reform efforts would start at the highest university level and then filter down to colleges, schools, and departments.

Capacity-building for Faculty in Developing Cases

Beyond guideline implementation, capacity-building includes helping faculty navigate the P&T process. For example, the University of MN-Twin Cities worked with other University of Minnesota campuses to develop an engaged scholar promotion and tenure workshop series, which includes an overview of the P&T process specifically in relation to public engagement. During the workshop, successfully tenured engaged scholars share their P&T materials with participants and junior faculty can receive feedback on their own materials. Portland State University similarly supported junior faculty by collecting dossiers of successfully tenured and promoted engaged faculty and making those materials available for junior faculty to review. UNC Greensboro also provides semi-annual workshops and consultations. Describing the importance of these programs, Portland State Professor of Public Administration and former Associate Vice Provost for Engagement and Director for Community-University Partnerships Kevin Kecskes said, "if you never did it before, you don't really know what to do....so a good example is helpful."

Funding Supports such as Seed Grants and/or Teaching Reductions

The scan identified multiple approaches to supporting junior faculty through internal grants, teaching reductions, or awards that recognize and support the time-intensive nature of engaged scholarship. Community partnerships and public scholarship often operate on different timelines than traditional academic work, due to the need to build relationships with policymakers or practitioners, or to set up data sharing and other infrastructure for the research. Recognizing these constraints, universities have taken approaches including internal grants such as UNC Greensboro's Community-Engaged Pathways and Partnerships (P-2) grant, a cohort program that offers three years of funding to support the development of community-university partnerships. Portland State also offered faculty cohort mini-grants, which focused on particularly pressing community issues and supported faculty to develop an engagement strategy. Other approaches included joint faculty appointments with engaged initiatives on campus that provide recognition of their time and contributions. For example, joint faculty appointments offered by the Mitchell Center for Sustainability Solutions at the University of Maine provide space for faculty to focus more of their time on their most societally impactful work by tying significant portions of their compensation to this work, rather than to departmental responsibilities.

Multiple campuses have awards to recognize excellence in research for public impact (including UC-Berkeley and Washington State University (WSU)). For example, WSU's <u>Innovation and Entrepreneurship Award</u> recognizes a faculty member whose "...scholarly contributions and associated outreach efforts have measurably and significantly improved the lives of people through engagement with industry or other elements of the private sector." Interviewees shared that such awards can provide helpful recognition to junior faculty when seeking promotion and

tenure. Funding supports like these from university sources, while small, offer needed opportunities for engaged scholars to complete projects and obtain recognition for their work.

Infrastructural Supports to Streamline Pain Points in Partnered Scholarship

Infrastructure support can help initiate and nurture individual research partnerships that faculty carry out. It can be time-intensive to find possible collaborators, to respond to requests for collaboration (especially those that stretch a faculty member beyond their existing program of research), and to carry out the bureaucratic and logistical work that sustains a partnership. To address this, some universities have created roles to support the "matchmaking" aspect of engaged scholarship. Examples of this include faculty leaders such as interviewee David Hart who directs the Mitchell Center for Sustainability Solutions at the University of Maine, or staff liaison roles such as the Director of Strategic Projects and Initiatives in the Watts College of Public Service & Community Solutions and the Senior Director of Social Embeddedness (Arizona State University (ASU)). These liaisons help identify opportunities for engaged scholarship and connect faculty members with community and policy partners. In addition to the practical support these positions offer, they also demonstrate university priorities. As Dr. Cynthia Lietz, Dean of the Watts College at ASU, shared "...it's an example of, if we say this matters, we've got to have somebody who wakes up every day and that's what they're responsible for."

Mismatches between the needs of engaged scholarship and the realities of university structures can undermine partnership trust and impact, as well as create burdensome delays that undermine faculty's scholarly productivity and morale. Beyond P&T systems, several universities provide infrastructure and resources to support research partnerships and smooth the friction points between partnered scholarship and university systems (e.g., financial systems, Institutional Review Boards (IRBs), intellectual property and data-sharing). For example, IRBs are typically structured to view community members as *subjects* of research, rather than as partners, creating gray areas in the protocol. UNC Greensboro offers a community partner research ethics training module for community partners who serve as co-researchers, providing an alternative to the university's standard training. Further, there may be financial challenges in providing payments to research partners per the rules of university payment processes (e.g., vendor protocols, sub-awards). Even placing a community organization's logo on co-created materials with a university logo may violate campus branding protocols. Scholars working with government partners or other policymakers may face similar challenges.

All these pain points sap time from societally-impactful scholarship. As Dr. Andrew Furco, former Associate Vice President of Public Engagement at UMN-Twin Cities noted, these challenges can cause delays for faculty in their scholarship and promotion, potentially causing them to "...throw up their hands and say, you know, there are just too many barriers to conducting community-engaged research. I'm not going to do it." UC-Berkeley provides a nascent example of a faculty-driven process, with administrator support, to forge collaborative relationships among engaged faculty, the IRB, the intellectual property office, and financial systems leaders and staff to address these pain points, brainstorm innovations, and ease the pathways for effective partnerships and societally-impactful research.

Building Societally-Impactful Scholarship into Institutional Identity

The university cases indicate that efforts to support societally-impactful scholarship can depend on forces on and off campus, including campus culture and universities' relationships to neighboring communities. Interviewees noted that administrative turnover can pose challenges for the long-term sustainability of policy and culture change efforts. Multiple respondents shared that successfully integrating societally-impactful scholarship into institutional and individual identities – such as by embedding language in the mission or elevating its visibility – supported the long-term sustainability of reform efforts. The Promotion, Tenure, Innovation, and Entrepreneurship (PTIE) coalition recommends tying P&T reforms to institutional mission statements, such as the missions of land-grant universities created in service of their states.

Interviewees from Portland State and UNC Greensboro – both R-2 universities - explained how they built distinctive university identities around community engagement, which now provide resiliency to withstand internal and external shifts. Dr. Janke of UNC Greensboro suggested that being a community engaged R-2 is a meaningful way to differentiate the campus from neighboring institutions of higher education in an increasingly competitive student market: "...we are trying to be a distinctive campus, and so being a community engaged R2, now we're a minority serving institution, is sort of a way for us to differentiate ourselves from other places." While Dr. Janke noted that rankings like those from U.S. News and World Report do matter to the university, they also consider other, more specific rankings they receive, such as for social mobility or best value.

In the private university context, values framing examples include Stanford's "public impact," and Duke's "knowledge in service of society". Broadly, this focus on identity development can help align societally-impactful scholarship with higher-level university goals. In doing so, university changemakers can help efforts to advance engaged research sustain in the long term, making them less vulnerable to changing administrative priorities once they become a part of a university's identity. This can be especially true for universities still seeking to create a distinctive identity. A key consideration for funders and supporters of societally-impactful research is whether to focus resources on culture change in institutions where this identity is less well developed but which carry the potential for change, or to support the universities where societal impact and public engagement are already embedded in institutional culture.

Graduate and Early Career Training for Public Impact, Including Non-Academic Skill Sets and Career Paths

Supporting the next generation of faculty is critical for longer-term and larger-scale change — both as graduate students become faculty and undertake engaged scholarship and as junior faculty become leaders within their disciplines and universities. One strong example is the <u>Duke Graduate Academy</u>, which the university launched alongside its tenure standards reforms. It offers short courses for graduate students, professional students, and postdoctoral fellows including some focused on non-academic careers and public engagement. These courses help students and early career researchers identify how their work on public engagement or societal impact can fit into the potential career tracks available to professionals with their academic training. Early training at the graduate and postdoctoral level can complement the faculty training efforts described above to build overall capacity for societally-impactful scholarship.

Strengthen Cross-Campus Networks and Programs for Cross-Fertilization and Diffusion While each institution has developed initiatives to fit its own organizational culture and priorities, we observed strong enthusiasm for cross-learning, adoption, and adaptation of promising practices. The need to support and formalize networks for cross-learning and cooperation across universities emerged as a strong theme, as well as the potential of multi-campus public universities (e.g., the University of California (UC) System) to accelerate change and serve as hubs for reform efforts. Cross-learning and influence by flagship and peer institutions within the same university system can create pressure on administrators for policy changes and resource allocation, enable institutions to learn from each other across varying

levels of resourcing and progress on institutional change work, and amplify the ripple effects of time and resources invested across universities in the same system and/or connected as part of

networked communities of practice.

For example, the <u>Bridging the Gap</u> project supported by the Carnegie Corporation of New York is a highly successful, multi-university initiative for training, research, and outreach to bridge the gap between academia and the policy world, with a focus on foreign policy, international relations, political science, and related fields. It includes two professional development training programs: The <u>New Era Workshop</u> for Ph.D. students and the <u>International Policy Summer Institute</u> for postdoctoral researchers and faculty of all ranks. Through these programs, the initiative built a networked community of faculty doing societally-impactful research and engaging in policy spheres who can support their junior colleagues, sit on P&T committees, and contribute to a culture that values and promotes societally-impactful research in the foreign policy and international relations fields (Tama et al., 2023).

Another particularly promising network is the nascent ten-campus University of California Community Engagement Network (UCCEN), which holds quarterly meetings with two or three representatives from each campus, and convenes standing working groups on faculty evaluation, sharing of best practices, and collective advocacy for system-wide changes. This group worked with UC system leadership to shape the partnership evaluation criteria for a 2023 \$100m climate Request for Proposals from the state of California, incentivizing investigators across the state to engage in community partnerships that generate actionable research and address California's climate adaptation and resilience goals. The scan suggests that such models may be adaptable to other state university systems, or to formalized communities of practice among universities with a shared identity (e.g., athletic conferences or certain elective classifications). Some of the organizations discussed in the organizational cases below are also focused on network-building.

Increased Visibility of and Incentives for Societally-Impactful Scholarship in the Broader Research Ecosystem

Multiple respondents noted the uniquely important role that funders and external organizations can play in incentivizing societally-impactful scholarship. External awards and grants can be highly influential in demonstrating excellence in P&T cases; however, there is less funding and there are fewer prestigious prizes for engaged scholarship and policy impact than for traditional disciplinary research. External funders and organizations can address this gap by investing in grants and awards specifically focused on societally-impactful scholarship.

Funders may also incentivize societally-impactful scholarship by directly supporting institutional change work. Some current examples of funders already doing this include the William T. Grant Foundation's <u>Institutional Challenge Grant</u>, the Robert Wood Johnson Foundation's <u>Transforming Academia for Equity</u> award, the National Science Foundation's <u>Accelerating Research Translation</u> award, and Carnegie Corporation of New York's <u>Rigor and Relevance Initiative</u> and <u>Bridging the Gap</u>. We note that the funding levels of some of these awards are modest relative to the time-intensive nature of engaged scholarship and the investment of faculty time needed to enact institutional change. We discuss these models and other funder recommendations in a later section of this report.

Multi-Component Initiatives

Several universities have launched initiatives encompassing multiple change components, driven by university leadership, and supported by high-profile opportunities for faculty to pursue and be rewarded for societally-impactful research. Stanford Impact Labs includes significant, multi-year funding for local-to-global societally-impactful research, endowed tenured Public Impact Professorships, Scholars in Service funding for faculty leaves to work in public sector agencies and nonprofit organizations, and substantial staff support. Michigan's Bold Challenges initiative supports interdisciplinary teams conducting societally-impactful scholarship with funds and staff for projects in targeted policy areas such as climate change adaptation and equitable health care. Both initiatives involve coordination across multiple units of the university and substantial investment of resources to create impact-driven research initiatives or faculty appointments. While many universities do not have comparable resources, various components can be adapted and tailored.

Taken together, these ten types of innovations offer university leaders, faculty changemakers, funders, and others a spectrum of approaches to employ as they seek to support, incentivize, and elevate societally-impactful scholarship. Universities in the scan generally did not employ any approach in isolation but sought to implement several while adapting them to their unique institutional context. Universities that engage in future institutional change work will likely adapt a subset of these approaches depending on their goals and context.

Understanding University Context and Dynamics

Motivational frames. This scan included as much breadth as possible of public and private universities across geographic regions. As expected, illustrative cases suggest that campus context, identity, and culture influence strategies and approaches for supporting societally-impactful scholarship. For example, interviewees from public universities identified the value of university research to state government and taxpayers as a rationale for change efforts. Similarly, those at land-grant universities such as Maine and Washington State shared that the land grant mission itself became a rallying point and that the campuses attracted faculty who were already aligned with societal impact. For example, Dr. Hart shared, "Maine has this kind of deeper ethos of that [land grant] mission... it's just part of why we're here."

Interviewees from private universities like the University of Southern California (USC) named university innovation goals as helpful frames for reforming P&T guidelines in service of societally-impactful scholarship. According to Dr. Randolph W. Hall, Professor in the Epstein Department of Industrial and Systems Engineering and Director of the CREATE Center, USC's

emphasis on innovation bled into promotion & tenure standard reforms, with the university examining "...the diversity of research outputs, so things like data sets or software...other things that didn't look like an article - how would that fit into the profile?".

At minority-serving institutions such as ASU and Rutgers-Newark, social justice motivations drove the engagement of historically marginalized communities in research. Rutgers-Newark has an office for university-community partnerships that provides resources, such as training for students to participate in community-engaged research and offers guiding principles of community-engaged research relevant to the needs and makeup of the local community. According to Dr. Timothy Eatman, Dean of the Honors Living- Learning Community and Professor of Urban Education, this focus has led to outputs like a current project in which the university has been holding community meetings to understand what reparations mean to citizens of Newark. We are mindful that federal and state political contexts will be consequential for universities and faculty where societally-impactful research that focuses on issues like racial and gender equity is viewed as "divisive" and where agencies or legislatures seek to limit teaching and research on these topics, potentially restricting academic freedom.

In addition to institutional contexts informing the framing of societally-impactful scholarship, interviewees reported that institutional resource challenges pose barriers to adopting new initiatives, particularly at less-resourced institutions. When universities are faced with limited resources, societally-impactful scholarship initiatives can lose out in service of competing priorities. As discussed in the recommendations section below, it is important that funder investments that might require institutional commitments, especially financial ones, don't inadvertently disadvantage less well-resourced institutions.

Shared governance and balancing top-down and bottom-up institutional change processes. Champions for change reviewed for the scan held diverse roles across the university hierarchy, including university presidents (e.g., ASU); cross-campuses offices of research or engagement (e.g., WSU); and faculty who organized other faculty with brokering support at the vice-provost levels of administration (e.g., UC-Berkeley). Institutional change efforts can originate with actors holding any one of these roles, or multiple roles, and collaboration and buy-in across the university is necessary to institutionalize reforms. As Dr. Rich Carter, principal investigator for PTIE shared about his experience supporting these efforts across campuses, "...you have to be ready to have those different types of conversations, because what is compelling to a provost, what's compelling to a single administrator is very different from what's compelling to a department chair or a college dean..."

While strong leadership at the top is important, faculty buy-in is also critical. Along these lines, Dr. Carter observed missteps at multiple universities in not engaging faculty at the beginning of these change conversations: "Oftentimes, they [administrators] felt like they had to get all their ducks in a row, and then come to Faculty Senate, and what that immediately creates [is] this perception that this is being pushed on them." Similarly, reflecting on serving as the Associate Vice President for Public Engagement at UMN-Twin Cities, Dr. Andrew Furco shared that he had access to the President and Provost, and had the "bully pulpit" and authority to call a task force and recommend policies, but did not have the power to make policy. The Association of Public and Land-grant Universities is planning the release of a major report on Modernizing

<u>Scholarship for the Public Good</u> that will examine the entry points for institutional change available to actors situated at different points across the university.

Clarifying the "tent" and where to stake it: Any faculty members, university leaders, or other individuals who initiate reform efforts will have to think carefully about how broad and how inclusive their reform effort should be. A key contextual and political issue for campus policy and culture change involves defining the boundaries of societally-impactful scholarship – for example, should community-engaged research and translational research in partnership with industry groups be considered equivalent when considering faculty advancement reforms? Beyond a conceptual issue, this is a practical and political issue for campus changemakers, who will need to determine how "big a tent" to organize on their campuses. Disciplines already compete for limited university resources, and efforts to reward societally-impactful scholarship may touch already-simmering tensions among social scientists, natural scientists, humanities scholars, and others depending on how the "tent" is staked. Changemakers will need to answer a range of key questions, including: Who and how large are the constituencies affected by campus guideline changes? If funding investments, awards, or seed grants are available, who is eligible? Who will "see themselves" in the effort and who will push back? Is the focus on forms of scholarship that involve partnered research such as with government agencies and communitybased organizations, and does this extend to for-profit industry partnerships? What about faculty who engage in public discourse or translation, but do not engage in partnered scholarship?

University initiatives in the scan have already tried to address these tensions by drawing lines based on context, resources, and phase. For example, the well-funded Stanford Impact Labs model emphasizes the social sciences when funding teams working on the human dimensions of social problems across communities, government, and private sectors, with the rationale that social sciences lack the R&D funding available to STEM fields seeking to make societal and economic impacts. Such framing and organizing tradeoffs have been an energetic theme of the UC Community Engagement Network (UCCEN) and were discussed as challenges in multiple other interviews. For example, an initiative starting in the social science divisions of campus may be unaware of STEM-focused colleagues who use different terminology to describe engagement and impact, and who face similar institutional barriers. The need for strategy and brokering across diverse constituencies emphasizes the need for higher-level campus infrastructure and networking to share models and connect people and work across disciplinary boundaries.

Organizational Cases

Professional associations, nonprofit organizations, and cross-campus initiatives that formally convene and align campus leaders and changemakers are also important levers for supporting policy and culture changes at universities to value societally-impactful research. For example, disciplinary and professional associations, with capacity to reach member universities and colleges across the country, can play important roles through workshops, fellowships, and other initiatives. Programs such as Bridging the Gap (political science, international affairs) and the American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellowship program (encompassing diverse scientific disciplines) have had significant impact by training graduate students and junior faculty to engage with policymaking. The Bridging the Gap program also included programming for scholars to be rewarded for that impact in the academy, while AAAS fellows embed in government agencies. These programs may provide models for other disciplines. Some organizations, like Imagining America, have played a significant role in creating a space for engaged scholars to support and learn from each other, while drawing on their community to create critical scholarship on how to recognize engaged research in P&T (Ellison & Eatman, 2008). Below, we explore strategies that these and other organizations employ. Other organizations that were not engaged for this scan, but could be reached out to for future efforts include The Academy of Community Engagement Scholarship, Campus Compact, Coalition of Urban and Metropolitan Universities, Engagement Scholarship Consortium, International Association for Research on Service-Learning and Community Engagement (IARSCLE), Place Based Justice Network, Talloires Network of Engaged Universities, and the Research University Civic Engagement Network (TRUCEN).

Building Networks to Share Ideas and Strategies

Organizations that include leaders and members from multiple universities play a key role in advancing recognition of societally-impactful scholarship in P&T by providing space to share struggles and successes and by identifying and disseminating promising or transferrable models of institutional change. The Promotion and Tenure Innovation and Entrepreneurship (PTIE) coalition, for example, which includes membership from more than 65 universities and stakeholder organizations, featuring university members like vice presidents of research, vice provosts for academic affairs, deans, and department chairs, drafted recommendations to support the inclusion of innovation and entrepreneurship in P&T criteria, which were then published in Science and have been adopted at campuses including Oregon State University. The Association of Public and Land-grant Universities (APLU) published its Public Impact Research report in 2019, drawing upon learnings from a variety of land-grant institutions. APLU is currently working on its Modernizing Scholarship for the Public Good initiative, which includes a focus on P&T reform among other changes institutions can make to better support public impact scholarship, drawing upon lessons learned from their membership. LEAD California is a statewide nonprofit working with faculty fellows at campuses across and beyond California, that is now facilitating conversations around P&T in accessible event series (e.g., Dissertation Dish), in partnership with Collaboratory, a company that assists higher education institutions with tracking community engagement.

Echoed in conversations with these networks was the need to recognize impactful and engaged scholarship across different scales, with iterative interactions between scholars, departments,

schools, divisions, institutions, university systems and disciplines. In the relatively small ecosystem of higher education community engagement, colleagues and organizations are efficiently leveraging their capacities and relational practices to work together to build communities of practice, event series, conversational opportunities, and even align data (e.g., Collaboratory) with levers for change (e.g., Carnegie Elective Classification for Community Engagement, which certifies campuses' excellence in community engagement and publicizes its awards). Notably, these organizations have also conducted literature reviews and collected independent data on university institutional change efforts, including Collaboratory's national de-identified dataset of community engagement data, the Carnegie Elective Classification for Community Engagement's dataset drawn from campuses' annual applications detailing their efforts to support community-engaged research, and a member survey distributed by PTIE in 2019. Such efforts increase understanding of the landscape of institutional change work across institutions and have provided a launch point for new cross-campus initiatives and resource dissemination. However, more work is needed to connect these efforts with each other, identify gaps in knowledge, and popularize promising approaches.

Tools For Tracking and Measuring Societally-Impactful Scholarship

University networks, advocacy groups, and disciplinary associations have also helped universities reshape P&T by contributing resources on measuring the societal impact of research. In 2022, the Modern Language Association published guidelines for evaluating publicly engaged humanities scholarship in language and literature programs. Other organizations have also evolved to play unique roles in this space. For example, the application for the Carnegie Elective Classification for Community Engagement, housed within the American Council on Education (ACE), is based on a theory of change whereby the process of applying to receive the classification can facilitate transformative institutional change. Universities apply to this classification as a means of distinguishing themselves for excellence in community engagement. Dr. Marisol Morales, Executive Director of the Carnegie Elective Classifications, noted that the application serves as a self-study for universities, helping institutions have conversations across potentially siloed units and engage in strategic planning to incorporate best practices. Collaboratory, a for-profit software company, provides a tool to institutions of higher education to make visible their institution-wide community engagement data. Greater integration of these tools and metrics with institutional change work may be able to enhance the impact of that work and the field's understanding of what success and effectiveness look like.

Disciplinary and Professional Associations

Leaders within five disciplinary and professional associations were interviewed: American Association for the Advancement of Science, American Council of Learned Societies, American Political Science Association, American Sociological Association, and Social Science Research Council. While each has its own approaches and initiatives, several cross-cutting themes emerged. First, as representatives of their disciplines in the broader research ecosystem, these organizations each have a strong sense of how non-academic constituencies will respond to a greater focus on societally-impactful research. Largely, they believe such a focus is a necessary condition for connecting with and influencing government, foundations, and the private sector. Based principally in New York and Washington, D.C. these organizations are positioned to connect institutional change efforts in higher education to the broader priorities of these outside actors. Initiatives include fellowships for faculty to work in the public sector (e.g., AAAS),

fellowships and collaborative support for research with and work in the nonprofit sector (e.g., ACLS), and individual research and project support. Some also have convened task forces with deans and department chairs to make recommendations for relevant policy changes. The American Sociological Association has gone further, conducting a pilot study to test a structured process for engaging sociology departments and institutional administrators at three institutions in review of their promotion and tenure criteria with the aim of remedying the disconnect between traditional academic reward structures and socially transformative research. While efforts like these add value in connecting like-minded deans and department chairs and have some impact on disciplinary norms, they remain advisory in nature with policies set by individual universities. Many professional association leaders thus see their impact as constrained by member universities' policies and practices undervaluing societally-impactful scholarship in hiring, tenure, and promotion systems.

Additional Players in the Higher Education Ecosystem (including journals, funders)

There are challenges inherent in the tensions between conceptions of scientific rigor on the part of highly-ranked journals and influential funders, and the goals of advancing societally-impactful research. For example, in some disciplines, there is often a mismatch between the research designs favored by major funders and accepted into the most respected disciplinary journals (e.g., experimental designs with strong internal validity, longitudinal follow-up) and scholarship aimed at public impact that often involve "messier" designs needed to address timely questions of relevance to policy and/or community audiences. New developments have begun to alleviate this mismatch between the research that is funded and published, and the research that may have the most direct societal impact. For example, NSF and other major funders now place a greater emphasis on societal impact of research, as evidenced by the Broader Impacts criterion, participation in networks like TEFN, and the launch of the new Technology, Innovations, and Partnerships (TIP) directorate that allocates tens of millions of dollars to partnered scholarship to address societal challenges. The support of these funders provides additional resources and credibility for societally-impactful scholarship. Second, new journals are being developed whose branding emphasizes societally-impactful scholarship in ways that distinguish from "academiconly" journals on the one side and policy-focused publications on the other. These journals include editorial boards and reviewers with expertise in societally-impactful research. While not yet considered flagship journals, they do count in P&T reviews; to the extent that over time they build up their journal impact factor, they can potentially count even more.

Major book and journal publishers can be encouraged to be more receptive to societally-impactful research. For example, Oxford University Press (OUP) created a <u>Bridging the Gap book series</u> (with co-author Jentleson and colleagues from the Bridging the Gap Program as editors) for books in fields like political science and international relations aimed at making significant contributions to both scholarly and policy communities. These books have been no less valuable in P&T portfolios as other OUP series books; indeed, some have won scholarly association awards. This model is quite replicable for other disciplines and major publishers.

Criteria for national rankings of academic institutions, departments, and schools also shape incentives, especially for institutions with strong aspirations to upward mobility. Given the current questioning of some rankings on other bases, the timing may be propitious for working to increase emphasis on societal impact and engagement.

Emerging Metrics

Consideration of societally-impactful scholarship in faculty evaluation often comes down to metrics: this scholarship does not have measures of excellence considered comparable to citation counts, journal impact factors, and other indicators used for traditional academic scholarship. Yet, traditional academic metrics are not perfect indicators, even for academic quality. While citation counts can provide an indication of the quality and scope of an article's impact among other scholars, their reliability and validity has come into question (Sugimoto & Larivière, 2018). Various disciplines are expressing concerns about "citation cartels," informal and tacit dynamics involving "groups of authors that cite each other disproportionately more than they do other groups of authors that work on the same subject" (Fister et al., 2016). Similarly, as the 2018 Duke Tenure Standards Committee Report laid out, "high journal impact factors tend to be a function of a small number of articles that get high citation counts, and are thus not necessarily indicative of a general pattern that many or most articles in the journal are frequently cited." The report went on to note a study by Lozano et al. which found in three disciplines that the connection journal impact factor and high quality articles "has been weakening steadily since the beginning of the digital age . . . the percentage of top papers coming from the top journals has been decreasing." Overwhelmingly, the article concludes that "the [impact factor] is losing its significance as a measure of journal quality" and "there is no legitimate basis for extending the [impact factor] of a journal to its papers, much less to individual researchers" (Duke Tenure Standards Committee report, 2018; Lozano et al. 2012). With these metrics increasingly called into question, university actors may be more receptive to alternative measures of scholarly excellence, including societal impact.

Universities that have experimented with alternative metrics and scholars that have studied faculty evaluation largely call for more holistic and diverse measures of excellence to be applied to P&T and related decisions. For example, some social science and humanities scholars have called for a "values-enacted" assessment framework that incorporates measures like how frequently a scholar's work is cited in peers' syllabi or the effectiveness of their mentorship and review of other scholars' work to recognize the characteristics that most closely align with the stated values of academic institutions (Agate, et al. 2020). Others have offered indicators for the impact of faculty's research on social media or the effectiveness of their public communication as a means of assessing societal impact and engagement (Acquaviva, et al. 2020; McCall, et al. 2016). For community-engaged scholarship, frameworks for assessment (including one published for faculty at Portland State) often focus on the depth and quality of partnership with community groups, contributions to progress on pressing local issues, and capacity-building with partner organizations. These frameworks remain largely siloed, however, and more work is needed to develop them further and popularize their use.

<u>Coalitions</u> of thought leaders in academic, funding, and publishing roles are increasingly developing metrics that, compared to traditional measures, may be less prone to bias and more accurately assess both researchers' scholarly and societal contributions. In particular, participants in the open science movement have developed several means of assessment that do not rely on publication in traditionally closed-access journals. <u>Article-level metrics</u> (sometimes called "altmetrics") can track individual publications in real time for their views, mentions, and references on social media sites and other outlets, in addition to citations by other scholars. Tools

like Overton allow researchers to track where their work has been cited in thousands of policy documents, providing an alternative source of data for assessing the impact of faculty's work. Globally, more than 20,000 individuals and 3,000 organizations have signed the San Francisco Declaration on Research Assessment, which makes recommendations for "improving the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties." Increased engagement and collaboration between these movements and the change leaders and organizations focused on rewards and recognition for societally-impactful scholarship may be fruitful in developing and popularizing metrics to apply to faculty evaluation.

Recommendations to Funders

This scan identifies multiple ways for funders to advance societally-impactful scholarship and encourage universities to value and support this work. These options include expanded or additional support for individual initiatives as well as ways to catalyze broad-based systemic change across the research ecosystem. Our recommendations outline strategic investments and considerations for further inquiry. Although achieving systemic change is ambitious and influenced by factors and actors beyond the reach of even a concerted funders network, the scan shows there are motivated leaders to engage and existing investment strategies to build upon.

Investment options include convening senior university leadership, supporting cross-learning and action networks across a range of campuses, and scaling grant-making for societally-impactful scholarship and campus institutional change efforts in ways that **encourage and support cooperation and collaboration** within and among institutions of higher education. This focus on cooperation and collaboration is essential for funder efforts to accelerate movement-building among nascent networks of changemaking faculty, leaders, and institutions. We note that some TEFN funders are already invested in mechanisms aligned with several of our recommendations.

We divide our recommendations according to three ecological levels within and across universities:

- a. At the **faculty level**: increasing recognition and support for faculty generating societally-impactful research.
- b. At the **university level**: motivating and building capacity for broader faculty evaluation processes that value societally-impactful research.
- c. **Across academia**: Supporting coordination and cross-learning across the higher education sector and among key actors in the research ecosystem to enhance institutional change efforts.

Recommendations range in scale: some may be suited to individual funder strategies that build on existing investments. Others are best pursued by multiple funders in alignment or through joint or coordinated funding mechanisms that reach widely across higher education. Incentives and infrastructure for societally-impactful scholarship will be thoroughly institutionalized when they are widely adopted across universities and disciplines. Given the challenges of catalyzing and sustaining institutional changes, we urge consideration for funders to scale impact.

Faculty-Level Recommendations

Faculty Focus: Scaled support for the production, dissemination, and application of societally-impactful scholarship that enhances the visibility, legitimacy, and prestige of such research in faculty evaluation.

Interviewees stressed how major foundation-based initiatives for societally-impactful scholarship would add greater legitimacy to this work while exerting orthogonal pressure on university P&T criteria and enhancing funded scholars' professional reputations. Specifically, funders can expand the *scale* of grant programs aimed at societally-impactful research, *design* such programs

to maximize faculty's effectiveness and career development, and *coordinate funding* to enhance the visibility and prestige of societally-impactful research.

• <u>Recommendation #1</u>: Scale funding and increase visibility of grant programs aimed at societally-impactful research.

Interviews consistently indicated a need for more philanthropic and public funding for societally-impactful research. Many TEFN funders already support this scholarship through dedicated mechanisms for engaged or policy-focused research (e.g., Lenfest Ocean Program (The Pew Charitable Trusts), Evidence for Action (Robert Wood Johnson Foundation), William T. Grant Foundation Scholars Program). Unfortunately, relatively few faculty benefit from such dedicated programs, and the aggregate funding available is small compared to funding for more traditional disciplinary research. Larger scale and higher profile grant programs for societally-impactful research create opportunities for scholars to pursue the work and legitimize it in the eyes of university and disciplinary leaders and hiring or tenure committees.

University and organizational leaders in the scan emphasized the signal funders create with these programs as a critical leverage point for broadening faculty advancement practices and shifting culture. The National Science Foundation's investments in translational research through the new Technology, Innovation, and Partnerships (TIP) directorate offers one example of this approach. This directorate provides dedicated funding for societally-impactful research and also increases its visibility by demonstrating NSF's new priorities in this area. Other funders can consider pathways to create new programs or enhance the visibility of their existing programs.

• <u>Recommendation #2</u>: Design grant programs for societally-impactful scholarship to maximize researchers' effectiveness and career development.

Along with scale, the design of grant programs for societally-impactful research can help maximize the likelihood that such funding leads to faculty advancement and tenure. One option to consider is a tiered and phased approach to support engaged research throughout faculty members' careers. Such an approach would include seed grants for graduate students and junior faculty to pursue engaged methods or policy-relevant outputs, early-to-mid-career fellowships to develop long-term research partnerships or apply research to non-academic activities, and long-term mentorship networks or cohorts to connect funded faculty throughout their careers. The Bridging the Gap project, funded by Carnegie Corporation of New York, offers one promising model of long-term support that has contributed to shifts in culture across a discipline. The program makes training programs available for graduate students and faculty of all ranks to develop a policy focus and connects them with both senior faculty and policymakers for mentorship. As co-author Jentleson indicates, many Bridging the Gap alumni now sit on hiring and tenure committees at leading universities, creating opportunities for the next generation of scholars to advance with a focus on societally-impactful research.

The design of funding programs can also contribute to the success of societally-impactful research projects themselves. Promising strategies include building in time in grants for developing and planning community or policy partnerships, including establishing partnership agreements or advisory groups, supporting sufficient staff time for partnership management and

policy engagement, encouraging deliverables that are geared towards the needs of research users, and directing funding to community organizations engaged in a partnership. Many TEFN funders already support successful grant programs modeled on these principles. Pew's Lenfest Ocean Program, for example, includes a planning year for applicants to develop their partnership and a policy-relevant research agenda. Increasing the impact of these projects by applying and improving these program designs may help make the case for their contributions when considered in P&T.

• <u>Recommendation #3</u>: Consider options for enhancing visibility and prestige of societally-impactful research.

Cross-disciplinary funder networks such as TEFN are uniquely positioned to enhance the visibility and value of societally-impactful research in faculty advancement by coordinating funding. Because funding for this work is often of limited scale and is uncoordinated across disciplines, it lacks the perception of prestige that higher profile grants present when recipients are considered for promotion and tenure. Coordinated funding mechanisms can draw attention and engagement from university and disciplinary leaders that one-off grant programs may not achieve alone.

One coordinated funding option is a cross-disciplinary pooled fund for engaged, public, and translational research grants, designed to reach as wide an audience as possible. If a pooled fund is not feasible, funders can coordinate the timing and promotion of requests for proposal to advertise the scale of funding available among multiple foundations. They can design RFPs to be accessible to scholars in multiple disciplines, allowing for cross-promotion among multiple grantee networks. Another avenue to increase legitimacy and recognition of this work is to consider a prize or prizes for societally-impactful scholarship that require less dedicated attention than new grant programs or pooled funding.

University-Level Recommendations

Institutional Changemaker Focus: Funding for institutional changemakers to develop the skills needed to lead institutional change efforts, dedicate time to institutional change work, design policy reforms, and build campus coalitions.

Beyond funding for societally-impactful research itself, faculty leaders discussed the intensive time, effort, and multiple skill sets needed to advance campus support for societally-impactful scholarship. Institutional change processes, especially across disparate disciplines and units, require strategic, persistent, and politically-savvy organizing efforts to be effective. Changemakers must engage faculty and top university leaders to understand key issues, build coalitions and alliances, and participate in university governance processes to influence policy, practice, culture, and resource commitments. Faculty leaders are typically trained to be scholars, *not* organizational changemakers or fundraisers. As such, external funding can be effective both in supporting the *skills* and the *time* of institutional changemakers as they lead campus efforts, and by supporting the implementation of promising *mechanisms* like P&T guideline reform or specialized review committees that can help faculty achieve advancement for societally-impactful scholarship.

• <u>Recommendation #4</u>: Support technical assistance and resource development for institutional changemakers.

As this scan indicates, faculty and administrators are leading creative and promising institutional change efforts across a range of universities. Developing their skills, at the individual campus level or across campuses, could prove a worthy investment to enhance dissemination, uptake, and sustainability of promising practices and to equip changemakers to take advantage of open policy windows on their campuses. Grants could support faculty and administrators who have successfully led institutional change efforts to develop technical assistance documents or convene workshops to share their work with other changemakers. Funders can support training programs for faculty and campus administrators to engage with university leadership, or to pitch donors on supporting their institutional change projects. By centrally supporting these efforts, funders can engender a resource repository of promising tools or illustrative case models and assess the effectiveness of institutional change efforts. Such investments can be targeted and relatively small-scale, intended to equip grantees in a particular discipline or on a selection of campuses with the tools to effectively shift university policy and culture. Larger scale investments could support the creation of resources that are transferrable across the diversity of institution types and disciplines where societally-impactful scholarship is being promoted.

• <u>Recommendation #5</u>: Invest in larger-scale and long-term grants to university teams to support the work of institutional change.

Several TEFN funders have already made creative and impactful investments in campus institutional change processes to reward societally-impactful scholarship. Such programs ask university teams to identify processes or structures on their campus that, if reformed, would support more societally-impactful scholarship or help scholars doing this work advance. Then, they support these teams to work with colleagues to move reforms through campus governance processes, which are often time-intensive and arduous. Existing or past programs include the Institutional Challenge Grant (William T. Grant, Doris Duke Foundation, Spencer Foundation, The American Institutes of Research, Bezos Family Foundation), Irransforming Academia for Equity (RWJF) the Rigor and Relevance Initiative (Carnegie), and Accelerating Research Translation (NSF). These programs have been successful but limited in scope – both in the limited amount of funds directed to institutional change work and in their focus on specific schools or disciplines. Targeted funding could scale up existing programs to reach more universities, launch programs modeled on them across disciplines, or coordinate and scale efforts through a joint funding mechanism.

As the scan indicates, strategies for institutional change vary based on institution type, campus leadership, and political landscape. Funding for institutional change work must therefore be unconventional, including support for time spent understanding campus leverage points, convening faculty colleagues, developing materials for university leadership to review, and building consensus and coalitions for new policies or culture changes. Models like the grant programs above create dedicated funding streams for faculty and staff to prioritize this work. While working toward scale in the long term, funders could pilot efforts with limited funding for changemakers to prioritize this work (e.g., 30% to 75% time equivalent). Increasing the scale of

dedicated investment for institutional change work would allow more members of campus communities to commit to this work. One mechanism to achieve scale, utilized by the Institutional Challenge Grant, is to require matching funds or commitments for donor fundraising from university leaders, with considerations for less well-resourced universities.

• <u>Recommendation #6</u>: Support promising mechanisms to help faculty achieve advancement for societally-impactful scholarship.

This scan identifies a set of promising mechanisms to support and reward societally-impactful research already employed at universities. These include campus-wide committees to assess P&T guidelines (e.g., Duke), new formalized roles and review processes for assessing societally-impactful research in P&T (e.g., UMN-Twin Cities), faculty supports such as seed grants (e.g., UNC Greensboro) and teaching buy outs, and infrastructural support through campus centers (e.g., Maine; ASU, Stanford). Most of the models reviewed in this scan were initiated and funded by universities with external fundraising playing a supporting role. Extramural funding can spark opportunities for university changemakers to launch, expand, or standardize such promising programs.

University leaders identified in this scan could provide key thought partnership for funders who wish to design funding calls based on these models (for example, an RFP to design and establish a review committee for tenure applications that feature engaged research). Funder-supported pilot efforts could spread promising practices while also contributing to a knowledge base about what works in university institutional reform. Building towards scale over time, funders can encourage the proliferation of promising mechanisms across a range of universities.

Infrastructure Focus: Support university and disciplinary collaboration to promote long-term culture and incentive changes and institutionalize rewards for societally-impactful research.

Our scan indicates a sizable gap between catalyzing innovations in P&T and establishing the systems and sustained processes for *institutionalizing* such changes over time. Interviewees shared that promising reforms may be employed in university guidelines, but not necessarily implemented at the department level. The design of funding programs outlined below can help bridge this gap, by encouraging coordination and collaboration among *universities* and through *disciplinary* associations. This coordination is essential to ensure that promising ideas are tested, improved, and ultimately spread throughout higher education.

• Recommendation #7: Build a cohort of institutions and changemakers working to implement reforms by encouraging grantee collaboration across campuses and departments.

Existing donor mechanisms and university cultures often reward single-campus and even single-unit strategies (e.g., fundraising for a school or college within a campus; or a single campus within a state university system). This includes existing funding for institutional change work, which is limited to a subset of universities and departments. For promising ideas to spread, funding mechanisms must encourage strategies that approach faculty incentives as a system-wide challenge, requiring coordination among multiple and diverse stakeholders.

One promising mechanism would be funding programs that are both competitive *and* collaborative, requiring grantees to coordinate across campus divisions and among universities throughout the institutional change process, particularly during implementation of P&T reforms. One promising model comes from the nascent University of California Community Engagement Network, which helps institutional changemakers collaborate, build relationships, and learn from each other across the UC System.

To encourage cross-campus collaboration, funder-led convenings and workshops for institutional changemakers may provide a spark for initial participation and draw interest from key campus actors. For example, funder-hosted workshops for grantees to collaborate on institutional change work with other universities in their region, or other departments on their campus, could be a draw for additional campus partners. And grantee convenings for institutional changemakers to workshop and modify their approaches could increase the chances of long-term success.

• Recommendation #8: Collaborate with disciplinary societies and associations.

This scan indicates that while many university change processes to reward societally-impactful research are vertical (i.e., expanding campus-level P&T guidelines and filtering those changes down to colleges and departments), faculty advancement cases are also heavily influenced horizontally, by the norms, standards, and recommendations of their disciplines. National and international disciplinary societies are therefore key actors in P&T reform and related issues, as they play an important role in signaling and setting these norms and standards.

Funder efforts would be enhanced by collaborating with and supporting leading-edge disciplinary organizations, some of which are identified in this scan, to publish best practices for conducting and rewarding societally-impactful research, develop relevant metrics, and establish principles of excellence for societal impact and public engagement. This support could come in the form of grants to disciplinary societies or collaborations on strategy design for broadening incentives in a funder's field. Such an effort could complement university change efforts by exerting horizontal pressure on the departmental leaders and faculty committees that make advancement decisions. The American Sociological Association's pilot on department level P&T reforms represents one nascent project. Funders may also consider engaging societies' publishing arms to establish dedicated publication opportunities for societally-impactful scholarship (e.g., the Oxford University Press Bridging the Gap book series).

Higher Education Sector-Level Recommendations

Networking Focus: Convene networks of leaders at multiple ecological levels of the university for institutional cross-learning and coordination.

Interviews throughout the scan indicated that both organizational and university leaders would benefit from increased networking, cross-learning, and collaboration opportunities. Funder networks are uniquely positioned to employ funders' collective convening power to support such efforts, particularly as key players may be more likely to engage in funder-hosted convenings. An important consideration is engaging both top university administrative leaders along with

faculty and staff. University experiences discussed in this scan show that both groups must buy in and collaborate to successfully advance campus change efforts. Deeper networking can proliferate promising ideas and build a stronger coalition to advance societally-impactful scholarship.

• <u>Recommendation #9</u>: Convene a meeting or conference series of senior university leaders (chancellors, presidents, provosts) to advance a high-profile agenda for rewarding societally-impactful research.

Given their encompassing view of institutional mission and the wide range of constituencies with which they interact, senior university leaders may be uniquely positioned to link societally-impactful scholarship with other institutional priorities. Indeed, many of the initiatives we researched combined senior university leader support and faculty leadership, and interviewees indicated the central importance of presidential, provost, or chancellor-level leadership in establishing campus direction and sometimes offering "cover" for faculty-led change work. Convening a meeting or conference series of a cohort of senior university leaders (and ideally including senior federal funders and foundation staff) would provide opportunity for cross-learning and collaboration that would be beneficial both within their own campuses and across the higher-education landscape. By connecting these leaders, funders can help identify and solidify a stronger vanguard of changemakers in position to make high-level decisions at universities. Such convenings could allow these leading-edge officials to connect with and bring along leaders of other institutions on a peer-to-peer basis to elevate incentive structures and societally-impactful research as a higher education priority.

• <u>Recommendation #10</u>: Support a community of practice for faculty and staff institutional changemakers leading bottom-up institutional change efforts.

This scan uncovers many promising pockets of cross-learning and networking among faculty changemakers and other leaders (e.g., PTIE, LEAD California, Campus Compact). However, these efforts are not well connected with each other or organized into an effective sector-wide coalition. Interviewees were enthusiastic about the opportunity to learn from and collaborate with other universities, organizations, and associations in advancing change, as were participants at a spring 2023 meeting hosted on this topic at The Pew Charitable Trusts. Bringing these organizations into deeper collaboration could maximize their impact by directing attention at areas of shared priority and promise.

Funding for this collaboration could also draw in new partners at the more local level by hosting conferences and working groups within university systems and regionally to cross-fertilize the types of promising models and approaches discussed in this scan and identify collective action opportunities. The experience of nascent networks indicates that place-based and national approaches can complement each other. Funders may wish to support existing organizations to expand their networking efforts or to launch new cross-cutting initiatives. Regardless, funders can play a valuable role in supporting such exchanges and collaborations through the formalization of networks and in encouraging increased cooperation.

• <u>Recommendation #11</u>: Support a sustainable coalition among networks of university leaders, faculty changemakers, and other key actors who often work in separate spheres.

The cases in our scan varied among top-down administrator-driven and bottom-up faculty-driven changemaking efforts, but it was clear that both processes need to work in concert for effective and sustained change. While we recommend building communities of practice for both senior leaders and faculty-level changemakers, we also see the importance of connecting these groups with each other. While they often share goals of advancing rewards for societally-impactful research, collaboration between administrators and faculty can be challenging, particularly as university governance processes often pit these groups against each other. Broad coalitions including networks of both groups could speak with a more powerful voice.

In supporting these networks, funders would want to consider community or policy partners as additional participants or advisors. Other actors, such as publishers and disciplinary societies would need to be engaged to ensure a holistic perspective of end goals, unintended impacts, and leverage points. One potential model for this type of sector-wide collaboration on related issues is the ongoing National Academies Roundtable on Aligning Incentives for Open Scholarship, which aims to formalize a set of objectives and strategies across many key players in academia. More informal options for coalition building include supporting existing advocacy organizations to engage each other, or funder-driven convenings to connect and align related initiatives.

Limitations and Recommendations for Further Empirical Inquiry

This scan represents an initial and limited exploration of promising avenues for rewarding societally-impactful research in P&T. Our scan of relevant literature indicates growing interest in the link between faculty advancement processes and societally-impactful research. But research to date has not thoroughly studied university institutional change processes themselves and has not established a conclusive set of best practices. Studies of this work have also focused on highly resourced research-intensive universities; the field would benefit from a deeper understanding of promising models employed at other campuses. Next steps for inquiry could include broader analysis of the innovative programs, initiatives, and strategies identified here.

First, we note that our scope focused on P&T incentives, and referenced, but did not explore in detail, the research pain points for some forms of societally-impactful scholarship, especially those involving community partnerships. Multiple interviewees raised issues like financial payments to partners, data sharing, intellectual property, and institutional review boards as barriers for this type of societally-impactful research and time sinks for faculty impact.

Second, while we sought diversity in the types and locations of universities featured in this report, a larger sample size could help identify common threads at a wider variety of university types, particularly those less represented in the scan, such as private institutions. Dedicated study could also explore considerations for public universities in states (e.g., Florida, Texas) where legislation targeting higher education restricts tenure protections themselves and may inhibit some forms of societally-impactful scholarship, particularly those that explicitly aim to address the concerns of minoritized communities.

A third, more ambitious next step for inquiry could be to develop more systematic evidence about effective implementation and impact of institutional change efforts. That is, what are creative, best-practice approaches to *evaluate* campus innovations? Funders may also be interested to understand how broadened P&T processes and standards affect second-order concerns: do faculty perceive that societal impact is important to their institution and discipline? Do policymakers or community partners perceive shifts in how university actors engage externally? Do these changes lead to positive impact in the communities and the policy areas that are of highest priority? In short, innovations should be interrogated to gauge whether they are leading to the more impactful, equitable research culture that funders and universities to build.

These questions are particularly important because university institutional reforms do not take place in a vacuum. The ultimate outcomes of institutional change efforts to broaden faculty evaluation and build infrastructure for societally impactful scholarship should lead to improved uptake and application of such scholarship in policy, practice, and community. Study of these efforts may assess how and whether they build the capacity of public agencies or other partners to effectively use evidence and outputs in decision making. For efforts aimed at strengthening community-engaged research, relational aspects of the scholarship are paramount. In broadening reward systems, universities and funders may assess how well community- and practice-based knowledge is being valued and rewarded, how well ownership of research projects and outputs is being shared, and how investments in societally-impactful research are or are not leading to improved outcomes on issues of interest for research partners. Lessons from studies of research engagement and the use of research evidence may be particularly informative (Oliver & Boaz 2019).

A final area of further inquiry could focus on university-specific contexts that may shape effective and sustained institutional changes in faculty evaluation. Important questions for investigation include:

- What are key *organizational factors and processes* (administrator- *and/or* faculty-driven) that are effective levers in catalyzing and sustaining innovation?
- What kinds of organizational structure and infrastructural capacity and at what level of the institution are needed for sustained changes in incentives and culture?
- What is the relative effectiveness of broader versus more narrow framing of "societally impactful" scholarship for changemaking across campus contexts?
- What is the role of peer university influence on internal change processes, and how can support for networking and communities of practice be leveraged most effectively?
- What is the need for and potential fit of innovative impact metrics for strong cases across diverse university contexts and cultures?

Answers to the questions above may help university change leaders, funders, and others make the case that societally-impactful scholarship can and should be better recognized in P&T processes. Increasing the knowledge base in this area would help universities and organizations in implement effective reforms, as well as inform funders who wish to support such efforts by providing clarity on how, when, and why to assist.

Next Steps

It is encouraging to see the extent of recognition of the importance of societally-impactful scholarship and public engagement and the range of initiatives across various types of universities, as well as disciplinary and professional associations. Despite these promising developments, there are numerous challenges to be addressed. A diverse network of funders is uniquely well-positioned to influence both a range of universities and the broader academic ecosystem (including publishers, disciplinary societies, etc.) to encourage more substantial investments aligned with societally-impactful scholarship, increase cooperation and collaboration, strengthen recognition of societally-impactful scholarship, and align funding mechanisms to support needed institutional change work. The TEFN initiative thus holds great promise for making a significant and welcome difference in accelerating institutional support for societally-impactful scholarship.

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Appendix A: University Overview Table

Key takeaways summarize detailed case examples not published in this report.

Name	Institution	Campus	Classifications	Interviewee(s)	Key takeaways
	type (R1,	demographics	related to		
	R2,)		engagement		
Arizona State University (ASU)	Public, R-1	Tempe campus enrolls over 50,000 students; Minority- serving institution: Hispanic Serving Institution	Holds Carnegie Elective Community Engagement Classification	Bailey Borman, Director of Strategic Projects and Initiatives in the Watts College of Public Service and Community Solutions Cynthia Lietz, Dean of Watts College, Professor in the School of Social Work	 Support for societally engaged scholarship has been specifically championed by their university president. Found success through aligning engaged scholarship with university values. Situate engaged scholarship as a part of broader engagement efforts within teaching and service. Have positions specifically dedicated to supporting engagement.
Duke University (Duke)	Private, R-1	Enrolls over 16,000 students	Holds Carnegie Elective Community Engagement Classification	Co-author Bruce Jentleson Sally Kornbluth, former Provost Ed Balleisen, Vice-Provost for Interdisciplinary Studies, Professor of History	 Showcases a formalized strategy focused on centralized revisions to P&T policies that increased weight for "public scholarship" as mandated by the Provost, developed by a campus wide committee, and adapted by departments and schools to fit their disciplines. Have a Graduate Academy with short courses focused on non-academic skill sets and careers.
Portland State University	Public, R-2	Enrolls over 22,000 students;	Holds Carnegie Elective Community	Kevin Kecskes, Professor of Public Administration, former Associate Vice	Offers awards to raise engaged researchers' profiles on campus, mini-grants to faculty cohorts, and

(Portland		Minority-	Engagement Classification	Provost for Engagement and Director for	functional support with the P&T process.
State)		serving institution: AANAPISI	Classification	Community-University Partnerships	 Approaches are housed in central offices on campus and also support community-engaged coursework.
Rutgers University- Newark (Rutgers- Newark)	Public, R-2	Enrolls over 12,000 students; Minority- serving institution: AANAPISI and Hispanic Serving Institution	Holds Carnegie Elective Community Engagement Classification	Timothy Eatman, Dean of the Honors Living- Learning Community, Professor of Urban Education, former Faculty Co-Director of Imagining America: Artists and Scholars in Public Life	 Largely focused on how they can serve the local community, through community partnerships that span research, teaching, and service. Motivations include recruiting and being relevant to local students. Dedicated offices on campus for community engagement, with faculty and administrators also aligned with a locally-focused community engagement ethos.
Stanford University (Stanford)	Private, R-1	Enrolls over 17,000 students	N/A	Jeremy Weinstein, Professor of Political Science & Faculty Director of Stanford Impact Labs	 Multi-faceted campus-wide Policy Impact initiative including R&D-type funding for societally impactful scholarship (including co-creation with non-academic partners) with an emphasis on the social sciences, funding for faculty to take leave to serve in public and nonprofit sectors, endowed tenured Public Impact Professorships, and Ph.D. training for non-academic careers. Substantial staff support and ample funding from university president for initial project launch, with significant, multi-year funding sustained through philanthropic support.

University of California (focal cases UC-Berkeley & UC-Santa Barbara (UCSB) with discussion of UCLA, UC- Davis efforts as part of UC community of practice)	All universities within the 10-campus UC system are public and most are R-1s	Entire system enrolls over 280,000 students; Multiple UCs are minority- serving institution	Several campuses (UCLA, UC-Davis) hold the Carnegie Elective Community Engagement Classification; others in process (e.g. UC-Riverside)	Co-author Emily Ozer, Professor of Community Health Sciences & Faculty Liaison to Provost on Public Scholarship and Community Engagement; Co-author Bemmy Maharramli, former Associate Director of Strategic Initiatives for UCLA Center for Community Learning; Walid Afifi, UCSB Professor in the Department of Communication	 Faculty-driven approaches to achieve initial guidelines change were utilized by UC Berkeley. Recent progress to follow suit at UCLA, UC-Davis, and UC-Santa Cruz. Intentional organizing and diffusion of guidelines and other innovations by the nascent 10 campus UC Community Engagement Network (UCCEN). UCSB and other UC cases highlight considerations of how to define public impact and/or engaged scholarship, "how big a tent" to engage in campus-wide organizing, and the role of peer comparison and pressure for campus administrators.
University of Maine (Maine)	Public, R-1	Enrolls over 11,000 students	Holds Carnegie Elective Community Engagement Classification and is a land-grant university	Community Engaged Research and Pedagogy, Division of Social Sciences David Hart, Director of Mitchell Center for Sustainability Solutions and Professor of Biology and Ecology	 Utilizes an interdisciplinary center to house efforts to support engaged scholarship. Benefits from having individuals with a dedicated focus on societally-impactful scholarship, who have the time to conduct faculty outreach and support and communicate with university stakeholders serving on committees.

University of Maryland Eastern Shore (UMES)	Public, R-2 university	Enrolls over 2,000 students; Historically Black College	Land-grant university	LaKeisha Harris, Dean, School of Graduate Studies and Research	 Represents the challenges of trying to enhance support for societally-impactful scholarship as a less-resourced, R-2 university, in the material (e.g., less financial support available for research structure) and the abstract (e.g., getting faculty on board with a shift from teaching to research). Showcases some of the specific considerations such universities might have in regard to societally-impactful research, including values of accessibility and a desire to enhance the research profile of HBCUs in particular.
University of Michigan- Ann Arbor (Michigan)	Public, R-1 university	Enrolls over 49,000 students	N/A	Arthur Lupia, Professor of Political Science, Executive Director, Bold Challenges	 Initiative currently being launched to incentivize and support interdisciplinary teams doing societally-impactful scholarship in six main areas (e.g., climate change, public health). Centered with Vice Provost for Research, Executive Director is former NSF Assistant Director for Social, Behavioral and Economic Sciences.
University of Minnesota Twin Cities (UMN-Twin Cities)	Public, R-1	Enrolls over 50,000 students; Minority- serving institution: AANAPISI	Holds Carnegie Elective Community Engagement Classification and is a land-grant university	Andrew Furco, Professor in the Department of Organizational Leadership, Policy, and Development, former Associate Vice President for Public Engagement	 Ongoing and well-developed work to enhance recognition of engaged scholarship, as a part of a broader engagement agenda that also includes teaching and service. Housed in central offices on campus, this work included tenure and promotion revisions, as well as

University of North Carolina at Greensboro (UNC Greensboro)	Public, R-2	Enrolls over 18,000 students; Meets the definition of a Minority- serving Institution because of the amount of enrolled undergraduate students that self-report as African- American	Holds Carnegie Elective Community Engagement Classification	Emily Janke, Associate Professor in the Department of Peace and Conflict Studies, Director of the Institute for Community and Economic Engagement	subsequent reviews to see how these general guidelines were implemented in departmental language. Offers T&P workshops, as well as an internal review committee for engaged scholars. Motivation for emphasizing societally-impactful scholarship includes retaining their relevance to the local community and carving out a distinctive identity in the North Carolina educational landscape. Offers a model of both embedding this work in central offices and creating specialized centers. Strategies include revisions of policies, identity and image management, and internal funding mechanisms.
University of Southern California (USC)	Private, R-1	Enrolls over 49,000 students	N/A	Randolph W. Hall, Professor in the Epstein Department of Industrial and Systems Engineering, Director of the CREATE Center	 Revised their promotion and tenure policies to expand inclusion of innovative forms of scholarship, in order to be aligned with an evolving research landscape. To meet the needs of the diverse disciplines across campus, these revisions have been intentionally broad.

Washington	Public, R-1	Enrolls over	Holds Carnegie	Brian Kraft, Assistant Vice	 Focuses on innovation and
State		27,000 students	Elective	President in the Innovation	entrepreneurship.
University			Community	and Research Engagement	Housed in a centralized office on
(WSU)			Engagement	Office	campus. • Strategies include internal awards,
			Classification and		training series, and networking
			is a land-grant		groups.
			university		S · · · · · · ·

Appendix B: Organization Overview Table

Some organizational descriptions are taken verbatim from linked organization websites. Key takeaways summarize detailed case examples not published in this report.

Name	Description of organization	Interviewee(s)	Key takeaways
American Council on Education (ACE)	ACE's mission is to provide expertise to policymakers, higher education institutions and organizations, community leaders, and national and international entities interested in addressing complex societal issues through the effective engagement of higher education with community members and organizations. ACE currently houses the Carnegie Elective Classifications.	Marisol Morales, Executive Director of the Carnegie Elective Classifications	 Carnegie Elective Classification for Community Engagement is an important vehicle for facilitating institutionalization of community engagement. Application serves as a self-study, enables parts of the institution to have conversations with each other, and creates guideposts for strategic planning and incorporation of best practices. Sees community engagement as core to the work of the university (teaching and research, not only service).
American Association for the Advancement of Science (AAAS)	AAAS's mission is to advance science, engineering, and innovation throughout the world for the benefit of all.	Sudip Parikh, CEO and Executive Publisher, Science Journals	 Array of relevant programs (e.g., Science and Technology Fellowships, Center for Scientific Evidence in Public Issues). Stressed positive synergy between initiatives for greater societal and policy connectedness and advancing diversity, equity, and inclusion. Agrees on both the importance and the obstacles to making further progress on expanding academic incentives.
American Council of Learned Societies (ACLS)	ACLS supports the creation and circulation of knowledge that advances understanding of humanity and human endeavors in the past, present, and future, with a view to improving human experience.	Joy Connolly, President	 Related initiatives include <u>Leading Edge Fellowships</u>, <u>Luce Design Workshop for a New Academy</u> and <u>Sustaining Public Engagement</u> grants. Acknowledges these programs as valuable but limited as long as hiring, tenure and promotion standards don't change. Sees value in connecting efforts in the humanities to those in the social sciences.

American Political Science Association (APSA)	APSA supports excellence in scholarship and teaching and informed discourse about politics, policy, and civic participation.	Steven Rathgeb Smith, Executive Director; Abby Paulson, Director, Government Relations and Public Engagement	 Recently had a public engagement policy committee that encouraged departments to re-think tenure standards but balked at making recommendations. While not APSA-branded, political science has a number of successful initiatives including <u>Bridging the Gap</u> and the <u>Scholars Strategy Network</u>.
American Sociological Association (ASA)	ASA's mission is to serve sociologists in their work, advance sociology as a science and profession, and promote the contributions and use of sociology to society.	Heather Washington, Deputy Director	 Mission statement includes "promot[ing] contributions and use of sociology to society." Programs include Community Action Research Initiative grants, Sociology Action Network, and resources for sociologists interested in bringing sociological expertise to public audiences. Conducting a study of how to define and measure social impact.
Association of Public and Land- grant Universities (APLU)	APLU fosters a community of public and land-grant university leaders committed to equitably improving the lives and livelihoods of individuals, communities, and society through the continuous advancement of public higher education.	Elyse L. Aurbach, Director, Public Engagement and Research Impacts at the University of Michigan-Ann Arbor & APLU Civic Science Fellow; Kacy Redd, Associate Vice President, Research & STEM Education	 Modernizing Scholarship for the Public Good initiative includes a focus on promotion and tenure reform, as well as funding needed to support engaged scholars. Future work in this area includes targeted inquiry into the impact of supporting engaged scholars and implementation of supportive efforts.

Collaboratory	Collaboratory is a software company that helps institutions understand the landscape of their engagement - the who, what, where, when and why of activities designed with and for their community.	Lauren Wendling, Director of Institutional Success	 Provides a tool to institutions of higher education to capture their institution-wide community engagement data. Works with campuses from the early stages through projects, helping campuses tell the story of community engagement, with P&T part of this conversation. Helps build communities of practice with partners and works closely with ACE/Carnegie Elective Classification on Community Engagement.
LEAD California	LEAD California builds the collective commitment and capacity of colleges, universities, and communities to advance civic and community engagement for a healthy, just and democratic society.	Elaine Ikeda, Executive Director	 Works both in California and nationally; efforts to address the P&T issue have focused on training future faculty as well as a highly successful faculty fellows program. Works closely with other partners, such as Collaboratory and ACE to create communities of practice. Mentioned a systems approach for more transformative change.
Promotion and Tenure Innovation & Entrepreneurship (PTIE)	PTIE works to develop scalable solutions around a shared goal of improving assessment of innovation and entrepreneurship in promotion and tenure	Rich G. Carter, Professor in the Department of Chemistry and Faculty Lead for Innovation Excellence in the Office of Research, Oregon State University	 Collaborate with diverse universities and stakeholders to develop specific recommendations for supporting innovation and entrepreneurship in promotion and tenure. Future work includes a manual to assist with implementation.
Social Science Research Council (SSRC)	The Social Science Research Council mobilizes policy-relevant social and behavioral science for the public good.	Anna Harvey, President	 Targeted support as convener and source of seed money and other support for various projects. Related programs and initiatives include Emergent Technologies and Democracy, Health and Society, and Conflict Prevention and Peace Forum. Have planning workshops underway on issues such as climate behavior and social media and political polarization