PHASE 2 SUPPLEMENTAL GUIDANCE ON INVESTMENT AND POLICY COMMITMENTS

1. Setting the Context

It takes more than federal investment for a region to translate research and technology into a globally competitive platform of growth. As part of the Regional Technology and Innovation Hubs (Tech Hubs) Phase 2 competition, the Designated Tech Hubs will need to demonstrate that consortium members and supporters are committed to institutional and policy change. Consistent with the Phase 2 Notice of Funding Opportunity (NOFO) application evaluation criteria 3, *Investments and Policy Commitments*, consortia members must pair funding with commitments to policy, program, and regulation changes and investment decisions to put forth a full suite of interventions that accelerate commercialization, equity, and economic competitiveness.

"Investment and Policy Commitments" are actions taken by stakeholders (individuals, organizations, or other entities) in the region to meaningfully improve the outcomes of EDA or other funding. Commitments can come from consortia members or from entities outside of the consortia. Commitments can come in a variety of forms and should fit the needs and assets of a region or community. Strong commitments do not need to be financial commitments; they can include policy or programmatic actions and/or new, specific, partnerships. For examples, see, e.g., section 5 of this document or section 1.c.i.(5) of the Phase 2 NOFO.

EDA has extensively reviewed the Phase 1 letters of commitment and "lab-to-market" proposals of the 31 Tech Hubs' Phase 1 applications for Designation. To be competitive for implementation funding, the Phase 2 NOFO asks Designees to increase the detail (i.e., how concrete and specific are the commitments?), credibility (i.e., why is EDA confident the consortium will follow through?), and ambition (i.e., how will the commitments increase the likelihood and magnitude of impact?) of commitments in their Phase 2 applications. Tech Hubs are also welcome to add net-new commitments as part of their Phase 2 application. This guide includes common pitfalls, best practices, and illustrative examples of "Investment and Policy Commitments". This guide is designed to be a thought starter for Tech Hubs as they build out their Phase 2 applications.

2. Common Pitfalls Related to Commitments

EDA encourages Phase 2 applicants to be cognizant of and mitigate against the following common pitfalls related to commitments. Strong applications will not include any of the following weaknesses.

- **Letters that conflate general support with specific commitments**: While many letters signal buy-in, advocacy, and general support, EDA is looking for commitments—new actions that an actor or institution will pursue to support a Tech Hub—that are timely, measurable, and meaningful. For example, an applicant may have indicated that retaining talent is a barrier to local and regional innovation in Phase 1. Then, in Phase 2, a commitment could include specific policies at universities, research institutions, and governments to incentivize talent to remain in a region. In Phase 2 partnership and support letters, EDA expects to see specific, actionable commitments.

- **Lab-to-market ideas that do not address policy change:** In Phase 2, applicants should identify specific policies or program shifts that could accelerate commercialization, diversity, or competitiveness (as opposed to discussing existing tech transfer policies generally or potential increased scale of existing co-working or entrepreneurship initiatives). EDA is seeking bold and substantive policy shifts and resource commitments to accelerate commercialization (see Sample Commitments below; EDA will also address these approaches in its Technical Assistance).
- **A lack of specific, actionable input from key actors who have the ability to change policy:** Policy changes that EDA deem competitive in Phase 2 require significant buy-in from executive leadership (e.g., University Presidents, Chancellors, Vice Provosts/Presidents for Research (VPRs), Governors, Mayors, CEOs, Lab Directors and other leaders) accountable for organizational or policy change. In Phase 2, EDA will be looking for proposals that provide strong evidence that senior leaders and decision makers are engaged and involved in the process.
- **A lack of collaboration and coordination across multiple commitments in the same application**: Siloed commitments are better than none at all, but coordinated commitments are stronger. For the next phase of the funding decisions, EDA expects more details on how those collaborations and partnerships will work together cohesively toward the consortium's strategy.
- **Under indexing on diversity and equity**: The more inclusive, diverse, and equitable its community of innovators, the more the Tech Hub will be capable of innovation. Therefore, applications should commit to strong connections between equity, diversity, and inclusion initiatives and innovation initiatives. Competitive Phase 2 commitments and proposed projects will specifically leverage the equity among and diversity of those participating in the innovation process. EDA expects specific ideas to enhance those goals as part of lab-to-market strategies and commitments.
- **A disconnect between commitments and gaps or challenges:** A strong regional strategy (the precursor to a strong Phase 2 proposal) acknowledges legacy rules, practices, incentives, programs, and investments that limit the region's capacity for global competitiveness. Policy commitments provide an opportunity for Designees to acknowledge what isn't working and use the competition to commit to and drive improvements, including involving new partners who may bring that set of expertise.

3. Best Practices in Identifying and Developing Commitments

To support applicants in securing commitments over the course of the competition, this document includes:

- Best practices in identifying and developing commitments across regional stakeholders; and
- A sample list of potential commitments that applicants may consider requesting as they develop their approaches to improve commercialization and local production of innovative research.

Note that while the list presented below is meant to be a sample of potential commitments, it is in no way comprehensive or complete, and applicants are encouraged to prioritize the investment, policy, or other interventions that are most appropriate and applicable to their regions and communities.

EDA encourages Tech Hubs to secure commitments not only from consortia members (including but not limited to the Lead Applicant and Component Project Leads) but also from other public, private, and philanthropic organizations in their communities and regions that can best complement EDA-funded projects. When considering which organizations are best suited to

support their proposals, applicants should consider the following elements that contribute to a good commitment:

a. **New**: A commitment should relate to activities that are new and would not have necessarily happened if not for the commitments established as part of the Tech Hub. Any organization willing to commit to supporting a project, policy change, or investment should articulate how the commitment will lead to things that would not have happened if the commitment had not been made.

b. **Timely:** Commitments should be timebound with a clear starting date and expected outcomes. A strong commitment will have a well-defined and realistic timeframe for planned activities.

c. **Targeted:** Commitments should be specific and have clear, well-defined inputs and objectives. Ambiguous commitments lack accountability, and reasonable commitment details allow for greater believability.

d. **Measurable:** Commitments should have clear outcome metrics that can be measured with available information. Metrics of success should be collected early and on a regular basis to signal accountability.

e. **Meaningful**: Most importantly, commitments should be things regional stakeholders genuinely believe will improve the commercialization potential, diversity, and competitiveness of a Regional Technology Hub. The commitments' goals should be ambitious and achievable.

EDA encourages letters of commitment to include a description of how the given commitment is new, timely, targeted, measurable, and meaningful, in line with the above. EDA will be evaluating commitment strength as part of the Phase 2 evaluation criteria.

4. **Investment Commitments**

Hubs may secure and align diverse investment commitments—e.g., private entities may commit to an investment to build out a new manufacturing line in a Hub; a state or local government may commit funds to a training program; an investment fund may create a targeted pool of capital focused solely on a Hub's technology and region; multiple actors may pool funds to repurpose an existing facility into a demonstration facility. EDA encourages Hubs to pursue and secure significant investments that are aligned with the Hubs' respective strategies and with proposed EDA Tech Hubs-funded projects; in most cases, EDA Tech Hubs funding alone will not sufficiently enable Hubs to realize their visions and achieve global competitiveness.

5. **Sample Policy Commitments** *(Not Comprehensive)*

As stated in the Phase 2 NOFO [section A.1.b.iv at page 8](#) and [sections A.1.c.i.(4),(5) at pages 17-19](#), examples of commitments could include both investments and policy changes, made by Tech Hub members or partners, that will foster a culture of innovation.

When considering what types of commitments would be most impactful in a given region or community, applicants should consider gaps in their local policies and strategies that, if filled, might help their region become globally competitive in its selected core technology area. Applicants should also consider how these commitments complement the projects they are asking EDA to fund.

Commitments may come from a range of stakeholders, including but not limited to governments, private-sector entities, nonprofits, philanthropies, educational/research institutions, and other organizations. These entities may be members of a Tech Hub consortium or not.

The sample policy commitments below are organized under **five thematic areas**:

a. Ensuring the benefits of innovation and commercialization accrue locally
b. Promoting research-based entrepreneurship
c. Attracting and retaining talent
d. Accelerating innovation through diversity, equity, inclusion, and accessibility
e. Creating and elevating economic development leadership for local cross-collaboration

As noted above, this list of sample policy commitments is intended only as a thought starter for Phase 2 applicants. Applicants are encouraged to prioritize the interventions that are most appropriate and applicable to their regions and communities, whether or not they are on the following list. Investment commitments are inherently financial, while policy commitments may or may not require funding to implement. It may be possible to use EDA Tech Hubs funding to supplement or enable the implementation of certain commitments depending on the nature and magnitude of the proposed EDA-funded activities; reach out to your assigned Program Officer or the [Tech Hubs inbox](#) with specific questions.

a. Ensuring the benefits of innovation and commercialization accrue locally:

- Create [innovation voucher](#) programs that reduce the barrier for small- and medium-sized manufacturers to receive technical (including but not limited to collaborative research programs, legal, engineering, capital, etc.) support from researchers
- Incentivize partnerships with local firms and entrepreneurs within broader corporate relations strategies
- Increase access to and expand pools of capital, which could include university endowment investments in local venture capital funds or directly in local startup companies; university proof-of-concept funding to help technologies cross the valley of death; regional venture capital funds focused on regional startups; strong regional interfaces to national or global capital markets; or other funding mechanisms to support taking technologies from lab to market (note, however, that while EDA dollars can be used to administer and operate these initiatives, EDA dollars **cannot** be used to capitalize a fund or otherwise be used to invest in or serve as debt for funds or companies)
- Provide opportunities to share knowledge and practice entrepreneurial skills, such as grant and [business plan competitions, communities of practice, or hackathons](#)
- Develop "first of its kind" demonstration facilities/testbeds/core facilities/access to lab-based equipment that provide startups access to shared facilities to accelerate commercialization of products and services in a consortium's selected core technology area
- Establish opportunities and venues for local design, creation, and testing of products and services, such as [makerspaces and core facilities](#)
- Offer grants to reduce the cost of novel manufacturing processes and experimentation and pilot production lines
- Provide local small- and medium-sized enterprises (and other employers) with assistance to access and utilize available [R&D](#) and CapEx tax credits
- Create and sustain capital networks that crowd in and syndicate follow-on funding for local startups
- Incentivize venture capital and other funds to create local pools of capitals that will invest in regional startups committed to domestic manufacturing and job creation
- Establish infrastructure banks to support large-scale infrastructure projects that use new energy or transportation technologies that bridge the gap between public and private capital, especially relevant for first-of-their-kind demonstration facilities

b. Promoting research-based entrepreneurship:

- Establish commercialization sandboxes with specific focuses for researchers, industry, and startups to experiment with technologies, such as manufacturing development facilities
- Expand the capacity of technology transfer offices to accelerate, incubate, and commercialize research, for instance by providing training, budgets for patent protection, hiring of staff with specific skills, launch funding for creating support structures such as Executives-in-Residence of graduate student Fellows programs, startup Pitch Days, etc.
- Create startup academies to train and coach potential entrepreneurs from research institutions in skills needed to succeed in a startup, as well as how to pitch their ideas to investors
- Pilot technology transfer office programs that take risks and try experimental approaches to commercialization, such as student competitions with startup funds as a prize
- Create networks of technology executive talent (e.g., executive-in-residence programs) to enable researchers and technologists to connect their innovations to business expertise
- Recognize commercialization and entrepreneurship in promotion and tenure guidelines
- Measure commercialization activity and impact on economic development, such as the number of invention disclosures received, the number of patents filed within the region, the volume of IP licenses and options to local companies and startups, the number of startups created within the region, number of jobs or companies created, and other measures of entrepreneurship at different stages
- Create funding pools at intermediary organizations that support researchers translating ideas from lab to market and develop startups, especially at research institutions
- Change leave policies to encourage students and faculty to take entrepreneurial risks so that students can retain full-time student status while launching companies and so that faculty can take leave without risking their status, lab, or funding
- Incentivize entrepreneurship- and industry-focused faculty researchers and innovators to be a part of multiple institutions through joint appointments at universities, labs, and private sector companies
- Create new leadership positions at public, private, and educational institutions specifically to accelerate technology-based global competitiveness (for instance, Innovation Officer roles)
- Leverage federal Enhanced Use Lease authorities (granted to DoD, NASA, and some national labs) to invite firms and non-federal entities onto federal R&D property

c. **Attracting and retaining talent:**

- Create networks of industry-focused workforce programs to train workers on new and emerging technologies at their workplace or demonstration facilities
- Create policies to sponsor immigrant entrepreneurs with advanced degrees exempt from the H-1B visa cap, including potentially through entrepreneur-in-residence programs at research institutions
- Partner with organizations that enable employers to adopt practices that tap into the talents of existing workers and remove barriers to good jobs, such as skills-based recruitment and hiring practices

- Create mentorship programs for pre-IP generation to encourage researchers (especially women and underrepresented minorities) to consider commercialization of their innovations
- Implement policies that would incentivize high-skilled (both U.S. and foreign-born) students to remain in the region as entrepreneurs and workers
- Utilize one of several immigration pathways for entrepreneurs to work in the U.S. (EB-1A, EB-2, EB-5, etc.)
- Create a Global Entrepreneur-in-Residency program that supports domestic and foreign alumni to stay in the region and build their startup, while mentoring others
- Incorporate workers earlier and more intensively in the R&D and commercialization processes through collaborative efforts between research institutions and labor unions (and other groups that represent workers)
- Create entrepreneurial leave programs at national labs and universities
- Establish clear and flexible Conflict of Interest agreements (consistent with Federal COI rules) among consortium members that do not stifle researchers from creating startups

d. **Accelerating innovation through diversity, equity, inclusion, and accessibility:**

- Unlock the innovation potential of rural and underserved areas through activities such as funding pilot programs, partnering with young companies, and providing professional assistance for prototype development
- Expand innovation and entrepreneurial activities beyond anchor institutions through tailored outreach to and engagement with underserved communities
- Create a supplier diversity program with proactive commitments to diverse suppliers and working with organizations to grow and expand the pool of diverse domestic suppliers throughout the supply chain
- Support a regional technology supply chain program that helps existing small manufacturers become key components of the domestic supply chain in the consortium's selected core technology area by allowing them to purchase necessary equipment, hire skilled workers, and access demonstration facilities to try out new machinery
- Make labs at research institutions more accessible to industry and small- and medium- sized enterprises, including off-campus micro-labs and other pre-competitive environments
- Create programs to ensure that workers have opportunities to collaborate directly in the demonstration of new technologies to inform the design of those technologies— as well as their development, production, and delivery—with the perspective, experience, and input of workers
- Promulgate policies that can better ensure affordable housing availability, transportation, and child care of entrepreneurs especially as the region develops and grows
- Include environmental justice organizations and other local nonprofits in regional governance and leadership bodies to address past injustices and proactively address potential harms to communities with industrial activity and development; clearly outline decision making authority and resources for those organizations to lead.
- Coordinate and facilitate researcher access to private sector R&D facilities to accelerate commercialization of technologies
- Co-locate research institutions and the private sector through micro-labs and other innovative solutions

e. **Creating and elevating economic development leadership for local cross-collaboration:**

   - Establish an "Office of Regional Innovation" led by a [Regional Innovation](#) Officer to spearhead the entire industry transition strategy, ensure common industry engagement between the labs and universities, and oversee industry partnerships at the new demonstration facility and ensure they are well-staffed with industry-focused economic development and technology practitioners
   - Establish other economic development leadership positions, with actual authority and reporting to principles
   - Create networks that connect research institutions, industry, capital sources, and startups to [share knowledge](#) through entrepreneurship, educational, and mentorship programs
   - Establish a regional framework for synthesizing and coordinating multiple funding sources and programs around a comprehensive strategy to address industry needs related to the consortium's selected core technology area
   - Standardize [licensing and technology transfer rules](#) among research institutions across the region
   - Standardize contracts for research institutions to partner with small- and medium-sized enterprises and industries in the region, such as standardizing licensing IP to startups
   - Coordinate across various organizations in the regional entrepreneurship ecosystem through strategies such as standardization of outcome reporting

6. **EDA's Policy Commitments Technical Assistance Process**

As part of the Phase 2 application period, EDA will provide technical assistance to Designated Tech Hubs on how to improve the quality of their investment and policy commitments. EDA anticipates that the quantity and quality of commitments will improve in Phase 2, as compared to Phase 1, and applicants are encouraged to work with all relevant regional stakeholders to make credible, specific, and timely commitments.

As stated in the Phase 2 NOFO A.1.b.iv (page 8) and A.1.c.i.(4),(5) (page 17-19), examples of commitments could include both investments and policies that will foster a culture of innovation. EDA will host virtual sessions on a range of topics (schedule forthcoming) during the application period.