

Northeast Big Data Innovation Hub Bylaws Draft

1. Mission

The mission of the Northeast Big Data Innovation Hub (Hub) is to identify high-priority societal challenges and to build public-private, multi-sector partnerships and consortia to address them with data-driven solutions. Its initial focus is on challenges specific to its founding priority areas – Cities & Regions, Data-Driven Education, Discovery Science, Energy, Finance, and Health – our vertical "Spokes." It also addresses fundamental challenges to the seamless use of data sciences across priority areas such as Data Sharing frameworks, infrastructure, and services; Ethics; Privacy and Security; and Data Literacy – our horizontal "Rings."

Finally, the Hub gives a voice to its many stakeholders across sectors to contribute to shaping the future of Big Data and how it impacts business, government, academia, and society.

2. Bylaws and Scope

These Bylaws establish the initial governance framework for the Hub and are designed to allow flexibility as the Hub determines, with feedback from the communities it serves, how it can best realize its mission and achieve financial sustainability beyond its seed funding by the National Science Foundation. The Hub will ratify a full set of bylaws before the end of its initial three years of operation.

2.1. The Hub Bylaws will be ratified by either two-thirds of the Steering Committee members attending the first available meeting in which a quorum (see section 5.3) has been achieved or by two-thirds of the full Steering Committee via an electronic vote (see section 4.4).

This document represents the operating guidelines of the Hub. Any changes to these Bylaws must be approved by either two-thirds of the Steering Committee members attending a meeting in which a quorum has been achieved or by two-thirds of the full Steering Committee via an electronic vote.

3. Hub Organization

The Hub organization includes an Executive Director; a Program Coordinator; additional support staff, as needed; a Steering Committee consisting of three working groups – the Executive Committee, the Governance Committee, and the Priority Area Leaders Group; and other committees that may be established to aid in strategic decisions or Hub operations.

3.1. Executive Director

- 3.1.1. The Executive Director reports to the Chair of the Steering Committee. The Executive Director is responsible for setting the strategic direction and managing the business operations and administration of the Hub to meet the Hub's mission, with the guidance of the Steering Committee. This includes the management of Hub staff, overseeing financial operations, management of stakeholder relationships, recruitment of new stakeholders, development of membership/partner models, organization of events conducted by the Hub, and fostering any projects that result from Hub or Spoke activities.
- 3.1.2. The Executive Director performs such other duties and has such other powers as the Steering Committee may, from time to time, prescribe and is responsible for any other duties not otherwise assigned by Hub bylaws or policy.
- 3.1.3. Upon resignation or termination of the Executive Director, the Chair of the Steering Committee, in consultation with the Steering Committee, will conduct a search for a new Executive Director. The nomination will be accepted following a majority vote by the Steering Committee. Notwithstanding the foregoing, while the Hub is coordinated by an academic institution, all hiring and other employment processes are subject to employment laws and policies applicable to that institution's employees. The Chair of the Steering Committee serves as the interim Executive Director until an Executive Director is hired.
- 3.1.4. The Executive Director will hire additional staff as necessary for the successful operation of the Hub, in consultation with the Chair of the Steering Committee and budget permitting. While the Hub is coordinated by an academic institution, additional staff members are employees of that institution and subject to employment benefits, laws, and policies applicable to that institution's employees.

3.2. Program Coordinator

- 3.2.1. The Program Coordinator maintains and makes available, as appropriate, the reports and meeting notes from all Steering Committee meetings and Executive Committee meetings.
- 3.2.2. Other responsibilities are assigned, as necessary, by the Executive Director.

3.3. Steering Committee

The governance of the Hub is ensured by a Steering Committee that acts as an oversight board for the Hub. Steering Committee members are expected to play an active role in advancing the mission of the Hub. The composition of the Steering Committee is representative of the diversity of interests among the Hub's stakeholders (in industry, academia, government, and non-profits). Members of the Steering Committee serve as the Chair, Chair-Elect, and Past Chair (as described in 3.3.1.1, below). Each of the Priority Area Leaders (as described in 3.3.5 and 3.4.4, below) serve

as members of the Steering Committee. The Executive Director of the Hub serves as a permanent *ex officio* member of the Steering Committee and the Executive Committee (as described in 3.3.3, below).

3.3.1. Steering Committee Terms and Responsibilities

Steering Committee members are appointed for 3 year terms. A Nominating Committee appointed by the Chair and the Executive Director proposes potential Steering Committee members. The Nominating Committee is chaired by a member of the Executive Committee and may include other members drawn from the Steering Committee. The Nominating Committee is expected to consult widely with the community and with members of the Steering Committee, soliciting nominations in an open and transparent fashion. Steering Committee membership approvals will be made on a regular rolling basis each calendar year to ensure an infusion of new perspectives. Additional details of the Nominating Committee structure and operations and of the Steering Committee Membership approval process will be described in the Hub Policy Manual.

Steering Committee members are expected to be actively engaged in the work of the Hub, selecting those activities that best reflect their passion and expertise.

The main function of the Steering Committee is to advise and assist the Executive Director in the management of the Hub and to broadly represent the interests of Hub stakeholders.

The specific responsibilities of Steering Committee members may vary from time to time and will be described in the Hub Policy Manual.

A Steering Committee member who becomes inactive for whatever reason may be asked to resign from the Steering Committee. A member may be removed by a two-thirds vote of the Steering Committee.

The selection criteria and process will be defined by the Executive Committee, in collaboration with the Steering Committee. The Executive Committee will approve the final criteria and process and review it on a regular basis to make changes that take into account the changing needs of the Hub. The selection criteria and the nomination and approval process will be described in the Hub Policy Manual which will be made available to all Steering Committee members.

3.3.2. Chair, Chair-Elect, and Past-Chair selection and responsibilities

The Hub initial three-year seed funding for the Hub was provided by the National Science Foundation. Therefore, the initial Chair of the Steering Committee is the PI of the NSF grant, Kathleen McKeown. The Hub will institute a rotating chairmanship consisting of a Chair, a Chair-Elect, and a Past Chair, all of whom will work together in assisting the Executive Director to set direction for the Hub. This will ensure an appropriate onboarding period and that the institutional knowledge of the position is preserved. The Chair serves for two years, with the

Chair-Elect serving one year before taking office and the Past Chair serving for one year after leaving office.

At the discretion of the PI, as long as the Hub is funded primarily by the National Science Foundation (NSF), one of the following two approaches will be used to select the Chair:

- 1) The PI will be the Chair. If the NSF grant is renewed and awarded to a new PI, the new PI becomes the Chair-Elect, if the grant timing permits an overlap with the current Chair, or the Chair, if the timing does not permit an overlap.
- 2) Another person may be recruited to serve as the Chair or Chair-Elect. Being designated the NSF Hub PI and writing other, general Hub proposals or other fundraising activities for the Hub will not necessarily be tied to Chairing the Steering Committee. Whenever the PI is not Chair or Chair-Elect, then the PI, the Chair, and the Chair-Elect work cooperatively to ensure that the terms of the award and reporting functions are satisfied. This convention avoids the need to reassign the PI as Steering Committee roles change.

The search process/discussions begin by October 1 and selections will be completed and approved by April 1 of the following year; terms begin July 1. If the Steering Committee Chair is not the NSF PI of the Hub, the Chair may be drawn from other current Steering Committee members or the new Chair or Chair-Elect may not be a member of the Steering Committee. If so, that person will also become a Steering Committee member. Alternatively, the new Chair or Chair-Elect may be someone who has previously served on the Steering Committee, or who is otherwise term-limited.

The responsibilities of the Chair, assisted by the Past Chair and Chair-Elect, are to:

- Lead the Hub Steering Committee;
- Be responsible for management, oversight, and direction of all Steering Committee activities;
- Work with the Executive Director and Executive Committee to prepare and annually update a strategic plan with input from Steering Committee members;
- Advise and work closely with the Executive Director to execute the Hub's strategic plan;
- Interface with the Data Science community and the communities represented by the Hub's Spoke/Ring Priority Areas across stakeholder groups;

The Chair, Past-Chair, and Chair-Elect may each have additional responsibilities as may be prescribed from time to time by the Steering Committee or pursuant to these bylaws. If the Chair resigns or is absent or disabled, the Chair-Elect

performs the duties of the Chair. If the Chair-Elect has not been selected or is absent or disabled, the Past-Chair or other members of the Executive Committee take on the responsibilities of the Chair-Elect. If the Chair resigns and the Chair-Elect has not been selected, the Executive Committee selects a replacement Chair to fill out the term until a Chair-Elect is selected.

3.3.3. Executive Committee

The Executive Committee serves as an advisory committee to the Chair of the Steering Committee and provides active stewardship of major Hub activities. The Executive Committee shall exercise the power of the Steering Committee when the Steering Committee is not meeting.

Membership of the Executive Committee consists of the Steering Committee's Chair, Chair-Elect, and Past Chair, the Hub Executive Director (permanent *ex officio* member), and 3-5 at-large members. Each year, after broad consultation with members of the Steering Committee and nominations from them, the Executive Committee selects the next set of at-large members for two-year terms beginning September 1 which will be renewable for one more two-year term for a maximum service length of four years. At-large members are chosen to represent the Hub's "most important" activities or needs. It is expected that at least one Executive Committee member will be new to the Executive Committee each year. In case of a resignation, the Executive Committee may decide to select a replacement from the Steering Committee to complete the term.

To initiate the process described above, half of the founding Executive Committee at-large members will resign after the first term of service and the other half will be renewed for an additional two-year term to ensure a balance of new members/perspectives and institutional knowledge. The selection of who resigns after the first term will be determined by asking for volunteers and/or by lottery.

Additional or more detailed responsibilities of the Executive Committee may be described in the Hub Policy Manual.

3.3.4. Governance Committee

The Governance Committee is the primary body responsible for advising the Steering Committee on all governance related concerns, including changes to the bylaws. The Governance Committee is appointed by the Executive Committee. Prospective members may be nominated by any member of the Steering Committee based on criteria and by a process to be established by the Executive Committee and made public to the whole Steering Committee in the Hub Policy Manual. The Governance Committee is representative of the diversity of

stakeholders within the broader Steering Committee (as described in section 3.3.1)

3.3.5. Priority Area Leaders Group

The Priority Area Leaders Group comprises the Leaders for each of the Spokes and Rings (see section 3.4.4).

The Priority Area Leaders directly advise the rest of the Steering Committee on their Spoke's/Ring's goals, operations, and needs.

The selection criteria, approval process, term limits and responsibilities for the Priority Area Leaders will be described in the Hub Policy Manual.

3.3.6. Ad Hoc Committees

The Hub, by action of the Executive Committee, may from time to time convene special purpose committees to aid in the business of the Hub.

3.4. Spokes, Rings, Projects, and Priority Area Leaders Definitions

The following definitions for Spokes, Rings, and Projects were developed by the NSF to capture the commonality in structure across the four Big Data Regional Innovation Hubs. These definitions are subject to change based on future strategic directions the Hub may take and with the approval of the Executive Committee.

- 3.4.1. "Spokes" are the vertical priority areas established by the Hub. For example: Health, Cities and Regions, Discovery Science, and others. Aside from the areas of focus, the governance of these areas will be the same.
- 3.4.2. "Rings" are the horizontal priority areas established by the Hub that apply across Spokes. For example: Data Sharing, Ethics, and other areas that support work across the Spoke Areas. The governance of these areas will be the same as the governance of the Spokes.
- 3.4.3. "Projects" are specific projects proposed and executed under the areas represented by any Spoke or Ring. They can also be ad hoc projects or activities approved by the Executive Committee that cannot be classified under the Spokes or Rings in existence at the time of proposal or approval.
- 3.4.4. "Priority Area Leaders" are the leaders of their respective Spokes or Rings.

4. Hub Affiliation

Any individual or organization not affiliated with the Hub under previously described structures or mechanism will require approval to participate in the Hub community or use the Hub's resources or name. Approval mechanisms will be described in the Hub Policy Manual.

5. Hub Operations

5.1. Meetings and Chairs

- 5.1.1. Each committee formed by the Steering Committee or the Executive Committee will have a designated Chair who will preside over meetings.
- 5.1.2. Each such committee is expected to meet on a regular schedule made available to all Steering Committee members.
- 5.1.3. Special meetings of any committee may be called by the Executive Committee.

5.2. Time and Place of Meetings

- 5.2.1. Any committee member may participate in a committee meeting by means of conference telephone, videoconference equipment, or other communications equipment. Committee members may also be represented by proxy.
- 5.2.2. Any committee may allow motions to be raised, discussed, and voted upon outside of a regular or special meeting. In such event, the right of every committee member to openly discuss the motion and to vote on the motion must be ensured. The right of committee members to request a secret vote must also be ensured.

5.3. Quorum

- 5.3.1. Except where as otherwise provided in these Bylaws, at all meetings the presence of a majority of committee members entitled to vote at the meeting shall constitute a quorum for the transaction of business.
- 5.3.2. If a quorum is not possible at a meeting, the chair may adjourn the meeting, noting the reason for adjournment in the meeting report. In such event, the chair shall reschedule the meeting or cancel the meeting upon approval of a majority vote of the present members.

5.4. Voting

- 5.4.1. Any question or motion requiring a vote shall be conducted to allow for open and fair participation by all members or their respective committees who are in attendance in person or via phone or teleconference. All members shall have the right to express opinions subject to limitations on the duration of meetings.
- 5.4.2. Each of the various committee members is entitled to a single vote on voting matters that come before the full committee to which they belong.
- 5.4.3. Votes may take place via electronic voting mechanisms such email surveys, signed PDF consent forms, or other electronic polling mechanisms.

6. Action by Consent

Unless otherwise restricted by these Bylaws, by the Hub Policy Manual, or by action of the Steering Committee (or by the applicable committee if the action is in the context of the

work of a subcommittee), any action required or permitted to be taken by the Steering Committee (or the applicable committee) may be taken without a meeting, without a vote, and without prior notice upon consent by voting members comprising not less than the minimum number of votes that would be necessary to authorize to take such action at a meeting at which all Members entitled to vote were present and voted. The Program Coordinator shall be required to produce a meeting report for any action by consent.

7. Legal Matters

Writing proposals for Hub projects and fundraising for them are not necessarily tied to leading the projects covered by the proposal or fundraising activities. In some instances, another person might be recruited to lead the project. Whenever the PI is not a Project Director, then the PI, the Steering Committee Chair and Chair Elect and the assigned Project Directors work cooperatively to ensure that the terms of the award and reporting functions are satisfied. This convention avoids the need to reassign the PI as committee roles change.

8. Bylaw Changes

Changes to these Bylaws must be proposed and circulated to the Steering Committee at least two weeks prior to the Steering Committee meeting at which the changes are considered. Any Steering Committee member may offer amendments to the bylaws. Two thirds of the Steering Committee members must vote to approve any change to these bylaws.