Massachusetts Mathematics, Science,

Technology & Engineering Grant Fund

2005 Survey of Pipeline Regional PreK-16 Network Members

Presented to the Massachusetts Board of Higher Education

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Acknowledgements

Contents

Tables and Figures

Results Part IV: Network Relationships

Executive Summary

During Spring and Summer of 2005 a web-based survey of Network members was designed and implemented by the University of Massachusetts Donahue Institute (UMDI) on behalf of the Massachusetts Board of Higher Education (BHE) to document organization of, and participation in, the seven Regional PreK-16 Networks that had been established as part of the Pipeline Fund. The individuals who responded to the survey represented all seven of the Regional Networks, three professional sectors (higher education, K-12 education, and private industry), and a range of both professional and STEM education experience (anywhere from less than two years experience to more than 15 years).

Individuals joined their Networks through a variety of channels although most were participating at the request of their employer or as a result of an invitation from a Network member. Both the initial and current organization of the Regional Networks reflected these primary means of association: most respondents saw their Network as being organized by representatives of interested institutions or as a mix of representatives and individuals. The kinds of meetings that were available for members to participate in ranged from high-commitment roles such as steering or advisory committee positions to low-commitment roles such as "general member." At a statewide level, most respondents who attended at least one meeting (of any type) responded in a positive fashion to statements concerning the quality of their meeting experience. However, when broken out by Regional Network, the positive response rates covered a wide range.

When asked to describe the education and training focus of their Network, respondents focused more on issues related to teacher development than on issues related to student development. Furthermore, when asked what the focus of their Network *should* be, respondents principally identified the area of content-oriented teacher development.

Statewide, 70% of respondents reported that they had formed at least one new relationship as a result of their participation in their Network and almost 40% reported that they had formed relationships in two or more sectors. Most of these new relationships concerned Network-based projects or activities. However, more than 20% did report that the new relationship involved a non-Network, but still STEM-based, project or activity. About one-third of respondents thought it was unlikely that their new relationships would have formed without the Regional Networks. About one-third did think, however, that their new relationships were likely to continue without a Regional Network entity. Almost half of respondents thought it was unlikely that their Network would continue past this year without Legislative support.

Respondents were asked at the end of the survey whether the establishment of the Pipeline Fund Regional PreK-16 Networks was money well spent. About two-thirds of respondents replied in the affirmative with many providing examples of benefits from within their particular region. When asked in a follow-up question what was needed for their Regional Network to become institutionalized, many respondents gave detailed answers with funding issues being mentioned most frequently. Additional common factors mentioned as needed for institutionalization included: connections (to more people, other institutions, employers), planning (strategic and long-term), staff (full-time, independent), and time (anywhere from two to five years).

Introduction

The Pipeline Fund was established through a $2.5 million Legislative appropriation under the Acts of 2003 Economic Stimulus Trust Fund. The Massachusetts Board of Higher Education (BHE) was directed to administer the Fund with a focus on the following three goals:

(1) to increase the number of Massachusetts students who participate in programs that support careers in fields related to mathematics, science, technology, and engineering;

(2) to increase the number of qualified mathematics, technology, engineering and science teachers in the Commonwealth; and,

(3) to improve the mathematics, technology, engineering and science educational offerings available in public and private schools.

To achieve these goals, the BHE awarded a series of planning grants in Spring 2004 which established seven Regional PreK-16 Networks across the state linking institutions of higher education (both public and private), employers, PreK-12 institutions, and non-profit groups within each geographic area. The seven regions largely overlay those of the Regional Competitiveness Councils with two exceptions: the BHE divided the Greater Boston region into two, and combined the Southeast and Cape/Islands regions into one. As a result, the Pipeline Regional PreK-16 Networks consist of: Berkshire, Boston East, Boston West, Central, Northeast, Pioneer Valley, and Southeast.

Through the planning grants, each Network determined an individual set of regional priorities related to the three goals of the Pipeline Fund. After the Networks had completed their planning processes, the BHE initiated a second round of grants in Fall 2004 that was directed at funding specific programs that might serve as models for achieving the three Pipeline goals. The funded projects covered a range of student- and teacher-centered activities which incorporated both content- and skill-based leaning.

To evaluate the contribution of the funded projects to the Pipeline goals, and to examine the development of the Regional Networks, the BHE contracted with the University of Massachusetts Donahue Institute (UMDI) to provide technical assistance, evaluation and research services. The results of an online survey which are reported here are part of the UMDI's analysis of the Networks' formation, organization, and membership.

Methodology

The online survey was conducted from late June to late July 2005. It was preceded by a series of telephone interviews with 14 people during April and May of 2005. The people who participated in the interviews were chosen from lists forwarded to Donahue Institute staff by leaders of each Network. The leaders were asked to submit three to four names of individuals who could speak in-depth on the development of the Network. UMDI staff then selected a sub-set of the submitted names for the interviews such that a variety of geographic and professional perspectives would be represented. The intent of these interviews was to inform the development of the survey instrument which would be administered to a broader audience.

After the interviews, the instrument for the online survey was developed with the following guidelines in mind:

(1) That the instrument take approximately 10 to 15 minutes to complete;

(2) That people be able to complete the instrument spontaneously (e.g., that they would not need to take time to research answers to questions);

(3) That the instrument be focused on issues of Network development, organization, and participation; and,

(4) That the instrument translate easily into the formatting options available in the online survey administration program Survey Monkey.

After a draft of the survey instrument was reviewed by both Donahue Institute and Board of Higher Education staff, it was uploaded into the Survey Monkey administrative program.

The final survey instrument contained 24 multiple choice questions and three open-ended questions (see Appendix A for the full instrument). Questions were grouped into four "pages." Seven of the questions required answers. The others could be skipped if the participant elected to do so (although they were not labeled as "optional" in the survey). An open period of two weeks was set for survey administration.

Invitations to participate in the survey were determined as follows: Network leaders were asked to submit lists of email addresses for their "Network members." The meaning of "member" was deliberately left open as the manner in which Network leaders defined this term was to be part of the analysis of their organization. Upon submission, the lists were reviewed for duplicate email addresses and addresses of individuals who would not be appropriate survey respondents (e.g., UMDI and BHE staff). After editing, the email addresses for each Network were placed into the bcc: line of an email message that introduced the survey and gave a link to the web site where Survey Monkey was hosting the instrument.

Seven such messages (one for each Network) were sent out. After the first invitation, a few individuals emailed UMDI staff indicating that they were having difficulties accessing the survey. This resulted in a second email being sent with a renewed link to the survey (these follow-up email lists were also edited for "dead" addresses and individuals who requested they be removed from the first mailing list). A third email, thanking individuals who had responded, and reminding others of the approaching end date was sent two days before the closure of the survey.

After closure of the initial survey, the number of respondents was reviewed for geographic and sector distribution. The survey was to achieve at least a 20% response rate from each Network with representation from three professional sectors: higher education, K-12 education, and private industry. Four of the seven Networks had response rates of at least 20% and the targeted professional distribution at this point. Two Networks had response rates of less than 20% and one, while it had a 20% response rate, had no private industry responses. For these three Networks the survey was re-opened for an additional two weeks on the following basis:

(1) For the two Networks with response rates less than 20%, Network leaders were asked to put together a new invitation list. Their lists were to consist of approximately 30 individuals who would have a higher than average likelihood of participating in an online survey. UMDI staff then sent out a new email invitation (and link to the survey) to these individuals under the name of their Network leader to add the authority of that role to the request.

(2) For the Network that lacked any private industry responses, the Network leader was asked to send a message (including a link to the survey) to a few private industry members and request that they participate in the survey.

After the deadline for participation for these secondary requests had expired, the survey was considered fully closed and the results were downloaded from Survey Monkey into MS Excel for analysis.

The final list of invitees to the survey totaled 655 and was distributed across the seven PreK-16 Regional Networks as follows:

Figure 1: Survey Invitees by Region (N=655)

Berkshire: 54
Boston East: 149
Boston West: 116
Central: 58
Northeast: 66
Pioneer Valley: 112
Southeast: 100
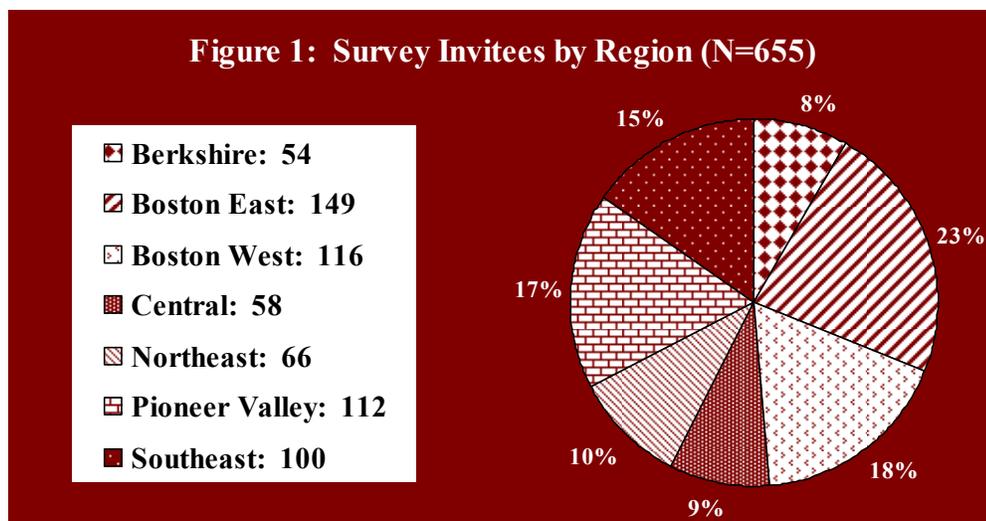
Four of the seven Regional Networks defined their membership in fairly broad terms as reflected in the large number of names/email addresses provided. Three defined their membership in narrower terms (at least for the purposes of the survey). The size of the membership lists may or may not correspond to the minimum or maximum number of individuals involved with any of the Networks. That is, while some Networks may have forwarded their largest informational-only distribution lists for the survey, organizationally they may engage only a fraction of those individuals on a regular basis. On the other hand, while other Networks may have forwarded a list comprised mainly of individuals with defined roles in the organization, they may in fact have other lists for the purposes of much wider, but less frequent, outreach.

About 24% (or 158) of those invited elected to participate in the survey. Figure 2 presents a distribution of the responses by region.

Figure 2: Survey Responses by Region (N=158)

- Berkshire: 12
- Boston East: 14
- Boston West: 24
- Central: 24
- Northeast: 26
- Pioneer Valley: 34
- Southeast: 24
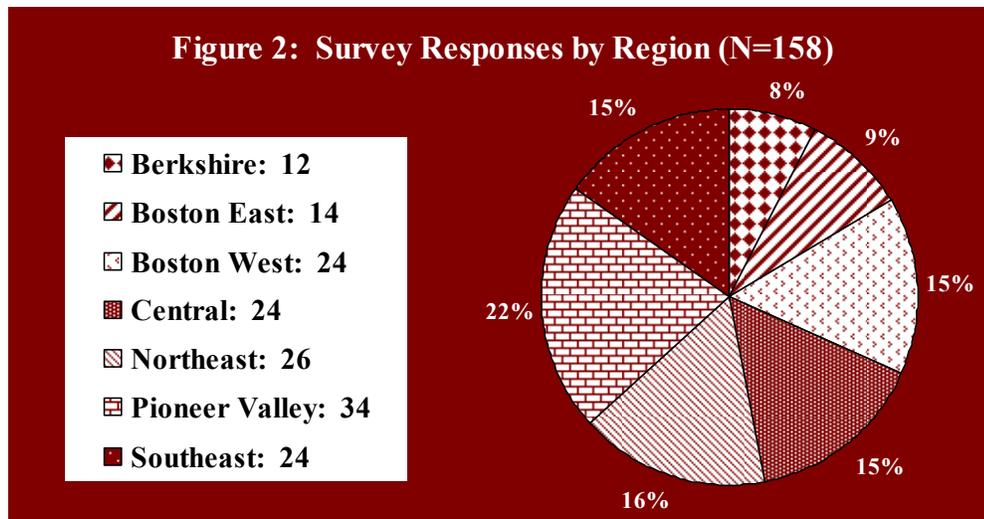
With one exception, all of the Regional Networks achieved response rates greater than 20%. It is important to note that the Boston East Regional Network, with a response rate of 9%, had implemented its own survey of Network members at the same time as this one. As a result, the burden of responding to two surveys on members of that Network may explain the lower response rate. Response rates by region were as follows.

Table 1: Response Rates by Region			
Region	**Invitees**	**Respondents**	**Response Rates**
Statewide	**655**	**158**	**24.1%**
Berkshire	54	12	22.2%
Boston East	149	14	9.4%
Boston West	116	24	20.7%
Central	58	24	41.4%
Northeast	66	26	39.4%
Pioneer Valley	112	34	30.4%
Southeast	100	24	24.0%

For the purposes of this report, questions from the survey have been grouped into five sections: (1) Respondent Characteristics, (2) Participation Characteristics, (3) Network Organization, (4) Network Relationships, and (5) Open-Ended Comments. Each of these groupings is discussed in a section of the report connecting the survey questions to the purposes of the Pipeline Fund. In addition, percentage calculations of the results of each individual question are displayed in figures and tables. Following these analytical sections are a series of appendices which contain the survey instrument (Appendix A), the numerical distribution of responses for questions in each group (Appendices B through E), and the open-ended comments (Appendix F).

Results Part I: Respondent Characteristics

Distribution of Respondents by Professional Sectors:

One of the purposes of the Regional PreK-16 Networks is to bring together professionals from a variety of sectors to address issues of Science, Technology, Engineering, and Math (STEM) education within their geographic region. In particular, the Networks seek to provide a communal forum for members of higher education, K-12 education, and private industry to develop effective student and teacher programming. The individuals who responded to the survey represented all of these sectors, although higher education and K-12 education were much more strongly represented than private industry.

Figure 3: Professional Sector of Respondents by Region (N=158)
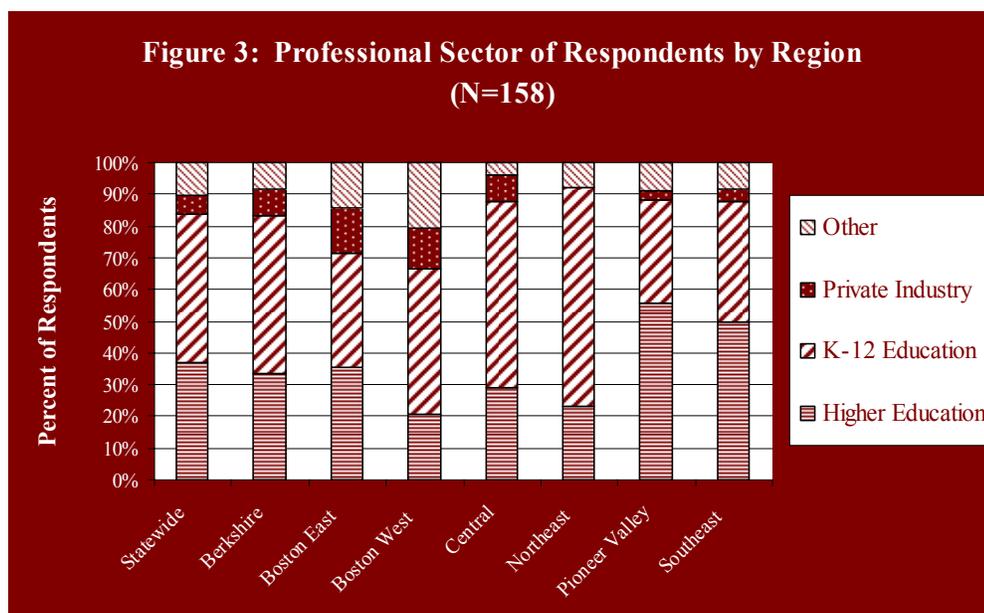
Statewide, almost half of the respondents indicated that they were members of the K-12 education community. About one third indicated they were from higher education. Only 6% indicated they were from private industry. The remaining 10% identified themselves as "other," describing themselves further as consultants, members of non-profit agencies, guest lecturers, and members of the Workforce Investment Boards (WIBs).

Years of Experience in Sector:

In addition to respondents' distribution across professions, the survey recorded respondents' years of experience within the professional sector they were representing. This is of interest insofar as a variety of experience levels may add to the diversity of educational perspectives and implementation strategies that are discussed by the members of each Regional Network.

Statewide, more than 60% of the respondents indicated they had 10 or more years of experience within the sector they were representing. Almost 19% said they had five to nine years of experience. Slightly more than 20% had four years of experience or fewer. Figures 4 and 5 present respondents' years of professional experience within the sector they are representing by region and by professional sector.

Figure 4: Respondents' Years of Professional Sector Experience by Region (N=156)

Figure 5: Respondents' Years of Professional Sector Experience by Sector (N=156)
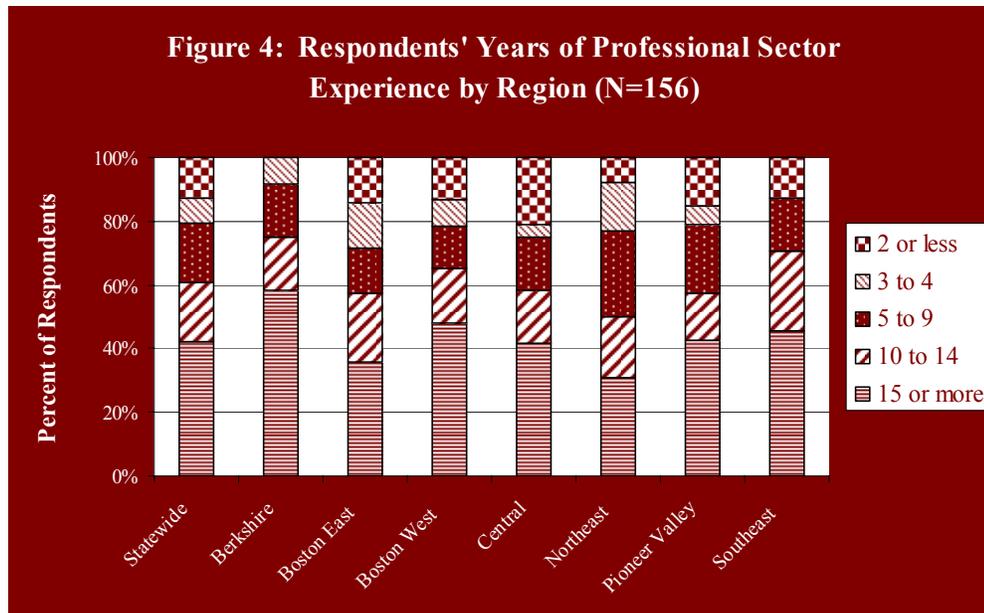
Years of STEM Experience:

Lastly, given that STEM education initiatives have a long history in Massachusetts, the survey documented respondents' amount of STEM education experience. Just as a variety of professional experience levels may increase the number of perspectives available within a Network for addressing Science, Technology, Engineering, and Math programming initiatives, so too may a variety of experience levels in working with STEM education issues.

Statewide, almost 48% of the respondents indicated that they had 10 or more years of experience in working with STEM education issues. More than 19% said they had five to nine years of experience. One third had four years of experience or fewer. Figures 6 and 7 present respondents' years of working with STEM education issues by region and by professional sector.

Figure 6: Respondents' Years of STEM Education Experience by Region (N=156)

Figure 7: Respondents' Years of STEM Education Experience by Sector (N=156)
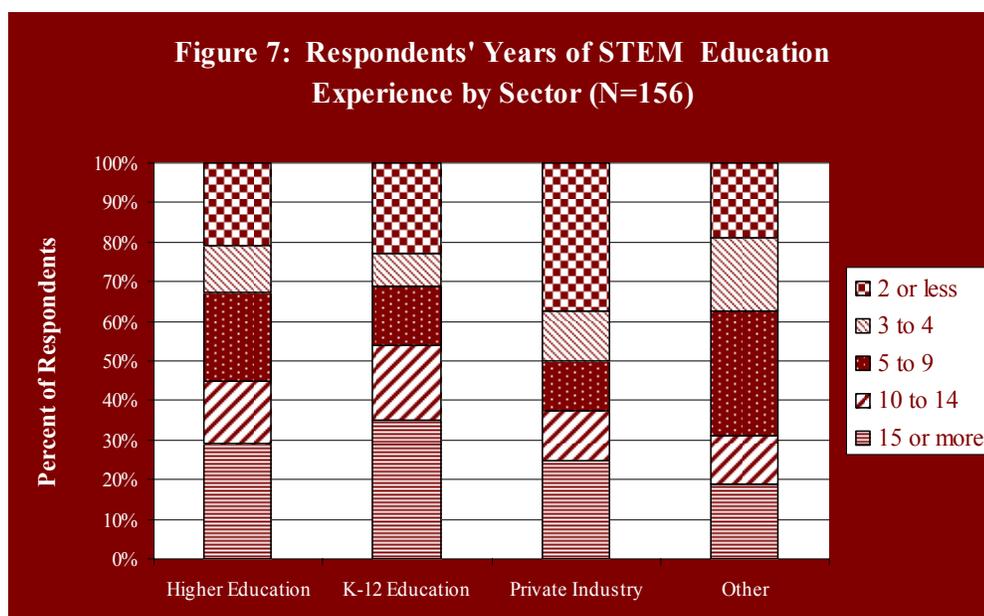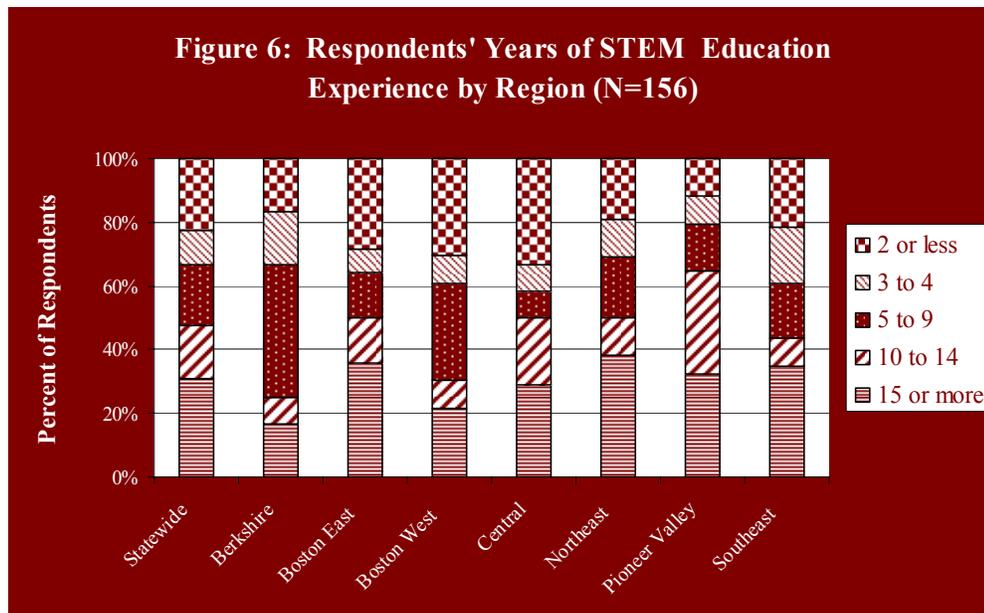
Results Part II: Participation Characteristics

This survey was conducted approximately one year after the founding of the Pipeline PreK-16 Regional Networks to help analyze how the Networks had grown and organized during their first year. The survey asked about opportunities for participation in the Networks. In addition, a sub-set of questions directed at those who had attended at least one Network meeting was intended to document the quality of these experiences.

<u>Network Participation Opportunities:</u>

Individuals from every Regional Network listed several possible Network participation opportunities, ranging from higher-commitment activities such as serving on an advisory or steering committee, to lower-commitment activities such as being a general member. Tables 2 and 3 list the percentage of respondents who identified each type of participation opportunity for their Network by region and by professional sector. Note that respondents could choose all options. As a result percentages in each column may add up to more than 100%.

Table 2: Perceived Network Participation Opportunities by Region								
Participation Opportunities	**Statewide**	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Advisory Committee	52.0%	66.7%	50.0%	47.8%	56.5%	44.0%	55.9%	50.0%
Steering Committee	38.7%	77.8%	28.6%	26.1%	47.8%	48.0%	38.2%	22.7%
General Member	78.7%	77.8%	78.6%	82.6%	78.3%	84.0%	94.1%	45.5%
Network Funded Staff	27.3%	55.6%	28.6%	17.4%	30.4%	28.0%	35.3%	9.1%
Other	14.7%	22.2%	0.0%	13.0%	21.7%	20.0%	11.8%	13.6%
Don't Know	6.0%	0.0%	0.0%	4.3%	4.3%	0.0%	0.0%	31.8%
N	*150*	*9*	*14*	*23*	*23*	*25*	*34*	*22*

Table 3: Perceived Network Participation Opportunities by Professional Sector					
Participation Opportunities	**Statewide**	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Advisory Committee	52.0%	64.9%	34.8%	100.0%	56.3%
Steering Committee	38.7%	45.6%	29.0%	75.0%	37.5%
General Member	78.7%	75.4%	78.3%	75.0%	93.8%
Network Funded Staff	27.3%	42.1%	1.4%	25.0%	31.3%
Other	14.7%	17.5%	13.0%	0.0%	18.8%
Don't Know	6.0%	7.0%	5.8%	0.0%	6.3%
N	*150*	*57*	*69*	*8*	*16*

Please note that the question associated with the above tables ("What kinds of participation opportunities are available in your Network?") could have been interpreted in more than one way. Some respondents may have interpreted the question as "What are all of the possible ways a person could participate in your Network?" Other respondents may have read it as "What participation opportunities currently have room for new people to join?"

In terms of actual Network participation, statewide more than 45% of respondents said they participated in Network advisory and/or steering committees. More than 17% identified "other" kinds of roles that they filled within their Network, primarily based on services that were provided to the Network (e.g., guest speaker, site host for a Pipeline project, evaluator, grant researcher, etc.). Less than 4% of respondents did not know in what capacity they were participating in the Network. Tables 4 and 5 show the percentage of respondents who identified each option as a way in which they participate in their Network by region and professional sector. Note

that respondents could choose all options. As a result percentages in each column may add up to more than 100%.

Table 4: Respondents' Actual Current Network Participation by Region								
Participation Opportunities	**Statewide**	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Advisory Committee	25.3%	33.3%	28.6%	20.8%	29.2%	23.1%	20.6%	29.2%
Steering Committee	20.3%	50.0%	7.1%	20.8%	20.8%	38.5%	2.9%	16.7%
General Member	69.6%	75.0%	78.6%	79.2%	66.7%	53.8%	79.4%	58.3%
Network Funded Staff	8.2%	8.3%	14.3%	8.3%	8.3%	11.5%	8.8%	0.0%
Other	17.1%	16.7%	0.0%	12.5%	16.7%	26.9%	23.5%	12.5%
Don't Know	3.8%	0.0%	0.0%	4.2%	4.2%	0.0%	0.0%	16.7%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 5: Respondents' Actual Current Network Participation by Professional Sector					
Participation Opportunities	**Statewide**	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Advisory Committee	25.3%	29.3%	20.3%	50.0%	18.8%
Steering Committee	20.3%	25.9%	13.5%	40.0%	18.8%
General Member	69.6%	69.0%	71.6%	40.0%	81.3%
Network Funded Staff	8.2%	12.1%	2.7%	10.0%	18.8%
Other	17.1%	15.5%	14.9%	10.0%	37.5%
Don't Know	3.8%	5.2%	4.1%	0.0%	0.0%
N	*158*	*58*	*74*	*10*	*16*

Generally, respondents from private industry had the highest rate of participation on advisory and steering committees and the lowest rate of participation as general members. Respondents from K-12 education had the lowest reported participation on advisory and steering committees.

Prior to the formation of the organizational bodies that manage the Regional Networks, as well as before they were granted funding for direct programming, each Network was required to engage in a process of needs assessment, resource identification, and organizational planning for their region. The projects for which each Network requested funding from the Massachusetts Board of Higher Education emerged from this "planning stage." Tables 6 and 7 show the percentage of respondents who had participated in this planning stage by region and by professional sector.

Table 6: Respondent Involvement in Network Planning Stages by Region								
Involved in Planning	**Statewide**	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Yes	44.9%	66.7%	35.7%	33.3%	45.8%	46.2%	52.9%	37.5%
No	48.7%	25.0%	50.0%	54.2%	45.8%	50.0%	44.1%	62.5%
No Response	6.3%	8.3%	14.3%	12.5%	8.3%	3.8%	2.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 7: Respondent Involvement in Network Planning Stages by Professional Sector					
Involved in Planning	**Statewide**	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Yes	44.9%	63.8%	29.7%	40.0%	50.0%
No	48.7%	34.5%	62.2%	50.0%	37.5%
No Response	6.3%	1.7%	8.1%	10.0%	12.5%
N	*158*	*58*	*74*	*10*	*16*

Statewide, less than half of the survey respondents had participated in the initial planning stage of their Network. Higher education respondents were involved in the planning stage at a higher rate than respondents from other professional sectors. K-12 education respondents were involved in the planning stage at the lowest rate.

Network Recruiting:

Members came to join their Networks through a variety of channels. About one-third of respondents joined their Network because they were asked by their employer or institution. A similar proportion joined because they were invited by a Network member or organizer. About 15% of respondents joined on their own (12% purely on their own with no other contributing connection). Members who joined as part of an already established smaller Network comprised 13% of the respondents. Almost 10% of respondents either did not know how they came to join the Network or did not answer the question. Tables 8 and 9 show the response percentages of each contributing factor by region and by professional sector. Note that respondents could choose all options. As a result percentages in each column may add up to more than 100%.

Table 8: Means by Which Respondents Came to Join Their Network by Region								
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Joined on my own	14.6%	8.3%	14.3%	20.8%	8.3%	7.7%	17.6%	20.8%
Joined as part of a peer group	5.1%	8.3%	0.0%	4.2%	0.0%	3.8%	11.8%	4.2%
Joined as a part of an already-established, smaller Network	13.3%	16.7%	7.1%	20.8%	8.3%	7.7%	14.7%	16.7%
Asked to join by my employer/institution	34.8%	33.3%	21.4%	20.8%	41.7%	61.5%	26.5%	33.3%
Invited to join by a Network member/ organizer	34.2%	41.7%	28.6%	29.2%	37.5%	30.8%	38.2%	33.3%
Other	2.5%	0.0%	0.0%	4.2%	4.2%	0.0%	2.9%	4.2%
Don't Know	1.9%	0.0%	7.1%	4.2%	0.0%	0.0%	0.0%	4.2%
No Response	7.6%	8.3%	21.4%	16.7%	8.3%	3.8%	2.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 9: Means by Which Respondents Came to Join Their Network by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Joined on my own	14.6%	15.5%	12.2%	30.0%	12.5%
Joined as part of a peer group	5.1%	6.9%	4.1%	0.0%	6.3%
Joined as a part of an already-established, smaller Network	13.3%	20.7%	8.1%	0.0%	18.8%
Asked to join by my employer/institution	34.8%	34.5%	39.2%	30.0%	18.8%
Invited to join by a Network member/organizer	34.2%	31.0%	29.7%	40.0%	62.5%
Other	2.5%	0.0%	5.4%	0.0%	0.0%
Don't Know	1.9%	1.7%	2.7%	0.0%	0.0%
No Response	7.6%	3.4%	8.1%	20.0%	12.5%
N	*158*	*58*	*74*	*10*	*16*

Network Meetings:

Each Regional Network held several types of meetings. Some meetings involved fewer people and focused on Pipeline project management issues. Other meetings involved many people and focused on peer networking and general STEM education issues. Tables 10 and 11 show the percentage of respondents who said they had

attended a particular type of Network meeting at least once by region and by professional sector. Note that respondents could choose all options. As a result percentages in each column may add up to more than 100%.

Table 10: Network Meetings Attended by Respondents by Region								
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
I have not attended a Network meeting	18.4%	8.3%	28.6%	8.3%	25.0%	0.0%	20.6%	37.5%
Preliminary Organizational meeting	43.0%	75.0%	35.7%	29.2%	41.7%	46.2%	41.2%	45.8%
Advisory Committee meeting	29.7%	33.3%	28.6%	25.0%	29.2%	38.5%	26.5%	29.2%
Steering Committee meeting	22.2%	33.3%	14.3%	29.2%	16.7%	50.0%	8.8%	8.3%
General Network meeting	58.2%	58.3%	42.9%	70.8%	50.0%	73.1%	61.8%	37.5%
Other	5.7%	8.3%	7.1%	4.2%	4.2%	3.8%	2.9%	12.5%
No Response	7.0%	8.3%	14.3%	12.5%	8.3%	7.7%	2.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 11: Network Meetings Attended by Respondents by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
I have not attended a Network meeting	18.4%	15.5%	23.0%	10.0%	12.5%
Preliminary Organizational meeting	43.0%	56.9%	29.7%	40.0%	56.3%
Advisory Committee meeting	29.7%	36.2%	23.0%	50.0%	25.0%
Steering Committee meeting	22.2%	27.6%	13.5%	40.0%	31.3%
General Network meeting	58.2%	60.3%	52.7%	60.0%	75.0%
Other	5.7%	8.6%	2.7%	0.0%	12.5%
No Response	7.0%	1.7%	9.5%	10.0%	12.5%
N	*158*	*58*	*74*	*10*	*16*

Statewide, more than 18% of respondents had not attended a Network-sponsored meeting of any type and an additional 7% did not respond to the question. Higher education respondents attended Preliminary Organizational meetings at a higher rate than those in other professional sectors (57%). Private industry respondents had the highest rate of attending both advisory and steering committee meetings (50% and 40%, respectively). K-12 education respondents had the highest rate of not attending any kind of Network meeting (23%).

Quality of Meeting Participation:

Respondents were also asked a series of questions designed to document the quality of individuals' participation. The total number of respondents who had attended at least one meeting was 147. Percentages in subsequent tables within this section are calculated based on that number.

Bringing together a group of people who are (usually) not familiar with one another and inducing them to act quickly and cooperatively may be a difficult task. Furthermore, if the group spans a spectrum of employment sectors, professional experience, and experience with the subject to be dealt with, then potential difficulties with communication, integration, and general efficiency may be compounded. While the Networks were charged with developing a governing organization, they were allowed to do so in a manner that best accommodated the resources and culture of their region as well as the specific variety of members that they were integrating. As a result, the types of meetings offered by each Network may differ along with the number of members who were involved with any given type.

Tables 12 through 17 show the rates at which respondents agreed with, disagreed with, or did not answer various statements concerning the meeting(s) they attended. Statewide, at least 65% of respondents generally or strongly agreed with each statement concerning the nature of the Network meeting experience, although there was a wide range of difference (usually about fifty percentage points) between the highest and lowest rates among the seven Regional Networks. In general, respondents from "Other" sectors agreed with each statement more frequently than respondents from higher education, K-12 education or private industry. Respondents from private industry had the second highest rate of agreement in four of the six measures, although theirs was the lowest for "I felt I actively participated in discussion." Respondents from K-12 education had the lowest rate of agreement in five of the six measures. The 'N' in each table is the number of individuals who attended at least one Network meeting.

Table 12: Percentage of Respondents Who Generally or Strongly Agreed with Meeting Quality Statements by Region							
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
I felt comfortable at Network meetings	74.1%	90.9%	66.7%	85.7%	63.6%	100.0%	66.7%	54.2%
I felt my participation was encouraged	69.4%	90.9%	66.7%	76.2%	63.6%	91.7%	66.7%	41.7%
I felt I actively participated in discussion	66.0%	90.9%	66.7%	66.7%	59.1%	95.8%	57.6%	41.7%
I was able to communicate easily with members from other sectors	66.0%	81.8%	66.7%	66.7%	59.1%	87.5%	63.6%	45.8%
I felt other listened to my contributions	65.3%	81.8%	66.7%	71.4%	63.6%	87.5%	57.6%	41.7%
I felt meetings were time well spent	65.3%	81.8%	66.7%	61.9%	63.6%	87.5%	63.6%	41.7%
N	*147*	*11*	*12*	*21*	*22*	*24*	*33*	*24*

Table 13: Percentage of Respondents Who Generally or Strongly Agreed with Meeting Quality Statements by Professional Sector				
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
I felt comfortable at Network meetings	74.1%	75.4%	70.1%	77.8%	85.7%
I felt my participation was encouraged	69.4%	71.9%	64.2%	77.8%	78.6%
I felt I actively participated in discussion	66.0%	68.4%	59.7%	77.8%	78.6%
I was able to communicate easily with members from other sectors	66.0%	70.2%	58.2%	66.7%	85.7%
I felt other listened to my contributions	65.3%	70.2%	56.7%	77.8%	78.6%
I felt meetings were time well spent	65.3%	70.2%	56.7%	77.8%	78.6%
N	*147*	*57*	*67*	*9*	*14*

Statewide, no more than 10% of respondents generally or strongly disagreed with each statement concerning the nature of the Network meeting experience, although again there was a range of difference among the seven Regional Networks. Respondents from higher education and K-12 education disagreed more frequently than respondents from private industry or other sectors, especially for the areas "I felt I actively participated in discussion" and "I felt others listened to my contributions."

Table 14: Percent of Respondents Who Generally or Strongly Disagreed with Meeting Quality Statements by Region								
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast
I felt comfortable at Network meetings	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%	8.3%
I felt my participation was encouraged	6.8%	0.0%	0.0%	9.5%	0.0%	8.3%	6.1%	16.7%
I felt I actively participated in discussion	7.5%	0.0%	0.0%	14.3%	4.5%	4.2%	6.1%	16.7%
I was able to communicate easily with members from other sectors	8.2%	9.1%	0.0%	9.5%	4.5%	12.5%	6.1%	12.5%
I felt other listened to my contributions	6.1%	9.1%	0.0%	4.8%	0.0%	8.3%	6.1%	12.5%
I felt meetings were time well spent	10.2%	9.1%	0.0%	19.0%	0.0%	12.5%	9.1%	16.7%
N	*147*	*11*	*12*	*21*	*22*	*24*	*33*	*24*

Table 15: Percentage of Respondents Who Generally or Strongly Disagreed with Meeting Quality Statements by Professional Sector					
	Statewide	Higher Education	K-12 Education	Private Industry	Other
I felt comfortable at Network meetings	2.7%	5.3%	1.5%	0.0%	0.0%
I felt my participation was encouraged	6.8%	7.0%	7.5%	0.0%	7.1%
I felt I actively participated in discussion	7.5%	8.8%	7.5%	0.0%	0.0%
I was able to communicate easily with members from other sectors	8.2%	8.8%	9.0%	11.1%	0.0%
I felt other listened to my contributions	6.1%	8.8%	4.5%	0.0%	0.0%
I felt meetings were time well spent	10.2%	10.5%	11.9%	0.0%	7.1%
N	*147*	*57*	*67*	*9*	*14*

Statewide, an average of 23% of respondents did not answer the statements about meeting quality, although again there was a range of difference among the seven Regional Networks.

Table 16: Percentage of Respondents Who Did not Answer Meeting Quality Statements by Region								
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast
I felt comfortable at Network meetings	22.4%	9.1%	33.3%	14.3%	36.4%	0.0%	27.3%	33.3%
I felt my participation was encouraged	23.1%	9.1%	33.3%	14.3%	36.4%	0.0%	27.3%	37.5%
I felt I actively participated in discussion	23.8%	9.1%	33.3%	19.0%	36.4%	0.0%	30.3%	33.3%
I was able to communicate easily with members from other sectors	23.8%	9.1%	33.3%	14.3%	36.4%	0.0%	30.3%	37.5%
I felt other listened to my contributions	23.8%	9.1%	33.3%	14.3%	36.4%	4.2%	30.3%	37.5%
I felt meetings were time well spent	23.1%	9.1%	33.3%	14.3%	36.4%	0.0%	27.3%	37.5%
N	*147*	*11*	*12*	*21*	*22*	*24*	*33*	*24*

Table 17: Percentage of Respondents Who Did not Answer Meeting Quality Statements by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
I felt comfortable at Network meetings	22.4%	17.5%	28.4%	22.2%	14.3%
I felt my participation was encouraged	23.1%	19.3%	28.4%	33.3%	14.3%
I felt I actively participated in discussion	23.8%	19.3%	29.9%	44.4%	14.3%
I was able to communicate easily with members from other sectors	23.8%	19.3%	29.9%	22.2%	14.3%
I felt other listened to my contributions	23.8%	17.5%	32.8%	22.2%	21.4%
I felt meetings were time well spent	23.1%	17.5%	29.9%	22.2%	14.3%
N	*147*	*57*	*67*	*9*	*14*

Results Part III: Network Organization

Two pairs of questions were asked in the survey concerning aspects of the Regional Networks' organization over time. One pair documented respondents' perceptions of how their Network was initially organized as compared to how it is currently organized. The other pair documented respondents' opinions on the current education and training focus of their Network compared to what they think it ought to be. Note that respondents could choose all options. As a result percentages in each column may add up to more than 100%.

Network Organization:

Tables 18 and 19 show the percentage of respondents who identified each option as a factor in the initial organization of their Network. Statewide, more than 37% of respondents said that their Network was initially organized wholly or in part by representatives of interested institutions. More than 30% of respondents said that their Network was organized wholly or in part by a mix of individuals and representatives from interested institutions. More than 36%, however, expressed that they did not know how their organization was initially organized or did not respond to the question. Respondents who were part of higher education or "other" sectors were more likely to see their Networks as initially organized by representatives of interested institutions. Respondents from K-12 education or private industry were more likely to not know how their Network had been initially organized.

Table 18: Respondent Views on How Network was Initially Organized by Region								
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
A single individual	1.3%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	4.2%
A group of individuals	17.1%	33.3%	14.3%	8.3%	25.0%	23.1%	8.8%	16.7%
Representatives of interested institutions	37.3%	25.0%	21.4%	29.2%	41.7%	50.0%	41.2%	37.5%
A mix of individuals and representatives	30.4%	58.3%	28.6%	20.8%	41.7%	30.8%	26.5%	20.8%
Don't Know	28.5%	16.7%	21.4%	37.5%	29.2%	11.5%	35.3%	37.5%
Other	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%
No Response	7.6%	8.3%	21.4%	16.7%	8.3%	3.8%	2.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 19: Respondent Views on How Network was Initially Organized by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
A single individual	1.3%	1.7%	0.0%	10.0%	0.0%
A group of individuals	17.1%	19.0%	20.3%	0.0%	6.3%
Representatives of interested institutions	37.3%	43.1%	32.4%	20.0%	50.0%
A mix of individuals and representatives	30.4%	39.7%	25.7%	20.0%	25.0%
Don't Know	28.5%	19.0%	36.5%	40.0%	18.8%
Other	1.3%	0.0%	1.4%	0.0%	6.3%
No Response	7.6%	3.4%	8.1%	20.0%	12.5%
N	*158*	*58*	*74*	*10*	*16*

Tables 20 and 21 show how respondents see the current organization of their Networks. Please note that the response option "A mix of individuals and representatives" was accidentally omitted from this question. Respondents who belonged to K-12 education saw their Network as currently being organized by a group of

individuals, either wholly or in part, at a much lower rate than respondents from other professional sectors. It is possible that this is related to the lower participation rate of K-12 education respondents in advisory and/or steering committees, and higher participation rates as "general Network members." That is, K-12 education respondents who are engaged in the Network only at a general member level may not be aware of which Network leaders are acting independently of their employer institutions versus which leaders are acting as representatives of their employer institutions.

Table 20: Respondent Views on How Network is Currently Organized by Region							
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
A single individual	4.4%	8.3%	0.0%	12.5%	8.3%	0.0%	0.0%	4.2%
A group of individuals	26.6%	25.0%	35.7%	20.8%	37.5%	30.8%	29.4%	8.3%
Representatives of interested institutions	47.5%	58.3%	28.6%	54.2%	29.2%	69.2%	50.0%	37.5%
Don't Know	22.8%	25.0%	21.4%	12.5%	25.0%	7.7%	26.5%	41.7%
Other	2.5%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	12.5%
No Response	8.2%	8.3%	21.4%	16.7%	12.5%	3.8%	2.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 21: Respondent Views on How Network is Currently Organized by Professional Sector				
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
A single individual	4.4%	3.4%	4.1%	0.0%	12.5%
A group of individuals	26.6%	29.3%	2.7%	30.0%	12.5%
Representatives of interested institutions	47.5%	50.0%	43.2%	40.0%	62.5%
Don't Know	22.8%	19.0%	28.4%	30.0%	6.3%
Other	2.5%	3.4%	1.4%	0.0%	6.3%
No Response	8.2%	3.4%	4.1%	20.0%	18.8%
N	*158*	*58*	*74*	*10*	*16*

Network Education and Training Focus:

Tables 22 and 23 show respondents' views on what constitutes the current education and training focus of their Network. Statewide, content-oriented teacher development had the highest percentage of responses (63%) and skill-oriented student development the lowest (34%). More than 22% of respondents chose "Don't Know" or did not answer the question.

Table 22: Respondent Views on Network Current Education and Training Focus by Region							
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Content-oriented teacher development	62.7%	58.3%	28.6%	54.2%	87.5%	73.1%	82.4%	29.2%
Skill-oriented teacher development	48.1%	50.0%	35.7%	50.0%	66.7%	61.5%	50.0%	16.7%
Content-oriented student development	43.7%	66.7%	28.6%	29.2%	54.2%	46.2%	47.1%	37.5%
Skill-oriented student development	34.2%	66.7%	21.4%	41.7%	41.7%	26.9%	23.5%	33.3%
Don't Know	13.9%	16.7%	14.3%	16.7%	0.0%	7.7%	8.8%	37.5%
Other	9.5%	8.3%	28.6%	16.7%	0.0%	11.5%	5.9%	4.2%
No Response	8.2%	8.3%	21.4%	16.7%	8.3%	3.8%	2.9%	4.2%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 23: Respondent Views on Network Current Education and Training Focus by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Content-oriented teacher development	62.7%	69.0%	60.8%	80.0%	56.3%
Skill-oriented teacher development	48.1%	50.0%	45.9%	40.0%	56.3%
Content-oriented student development	43.7%	46.6%	41.9%	40.0%	43.8%
Skill-oriented student development	34.2%	36.2%	31.1%	40.0%	37.5%
Don't Know	13.9%	12.1%	16.2%	20.0%	6.3%
Other	9.5%	13.8%	4.1%	10.0%	18.8%
No Response	8.2%	3.4%	9.5%	20.0%	12.5%
N	*158*	*58*	*74*	*10*	*16*

The survey also asked respondents' views on what they think should constitute the education and training focus of their Network. Tables 24 and 25 show these percentages. Statewide, content-oriented teacher development had the highest percentage of responses (75%) and skill-oriented student development the lowest (44%). It is interesting to note that when K-12 education responses for this question were broken out by experience, a strong difference of opinion emerged concerning the topic of content-oriented teacher development: 80% of more experienced K-12 education respondents indicated content-oriented teacher development should be the focus of their Network whereas only 50% of less experienced K-12 education respondents indicated it should be.

Table 24: Respondent Opinions on What Network Education and Training Focus Should be by Region							
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Content-oriented teacher development	74.7%	83.3%	57.1%	66.7%	83.3%	65.4%	91.2%	66.7%
Skill-oriented teacher development	57.6%	66.7%	50.0%	54.2%	75.0%	53.8%	58.8%	45.8%
Content-oriented student development	52.5%	75.0%	57.1%	41.7%	58.3%	38.5%	58.8%	50.0%
Skill-oriented student development	43.7%	66.7%	42.9%	41.7%	58.3%	26.9%	44.1%	37.5%
Don't Know	3.8%	8.3%	7.1%	4.2%	0.0%	3.8%	0.0%	8.3%
Other	12.0%	0.0%	21.4%	16.7%	8.3%	15.4%	8.8%	12.5%
No Response	7.6%	8.3%	14.3%	16.7%	8.3%	7.7%	2.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 25: Respondent Opinions on What Network Education and Training Focus Should be by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Content-oriented teacher development	74.7%	84.5%	71.6%	70.0%	56.3%
Skill-oriented teacher development	57.6%	67.2%	54.1%	60.0%	37.5%
Content-oriented student development	52.5%	58.6%	48.6%	60.0%	43.8%
Skill-oriented student development	43.7%	48.3%	40.5%	60.0%	31.3%
Don't Know	3.8%	3.4%	4.1%	0.0%	6.3%
Other	12.0%	12.1%	5.4%	10.0%	43.8%
No Response	7.6%	1.7%	9.5%	20.0%	12.5%
N	*158*	*58*	*74*	*10*	*16*

Results Part IV: Network Relationships

One of the purposes of bringing together members from diverse professional backgrounds within a single geographic area through the Pipeline Regional Networks was the expectation that new relationships would form among individuals and institutions. A further hope was that once these new relationships formed, they would transcend the parameters and purposes of the Network organization and yield added value to the region through additional grant- or privately-funded projects and activities, and other independently sustained collaborations.

Formation of New Relationships:

Tables 26 and 27 show the percentage of respondents or their institutions that had formed new relationships as a result of participation in the Pipeline Regional PreK-16 Networks. Note that respondents could choose all options. As a result percentages in each column may add up to more than 100%. Statewide, 70% of respondents reported that they had formed at least one new relationship as a result of participation in their Network and 38% reported they had formed relationships in two or more sectors. The largest percentage (44%) had formed at least one new relationship with the higher education sector. In addition, almost 40% of respondents formed at least one new relationship with the K-12 education sector. More than 35% formed at least one new relationship with private industry and other sectors (including the Workforce Investment Boards). Respondents from higher education formed more new relationships across all sectors than respondents from any other professional sector. Respondents from private industry and other sectors formed the fewest new relationships.

Table 26: Sectors with which Respondents or their Institution Established New Relationships as a Result of the Regional Network by Region								
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
Higher Education	43.7%	58.3%	28.6%	41.7%	20.8%	53.8%	52.9%	45.8%
K-12 Education	38.6%	41.7%	14.3%	29.2%	50.0%	53.8%	50.0%	16.7%
Private Industry	25.3%	50.0%	14.3%	16.7%	50.0%	42.3%	14.7%	0.0%
Other	10.1%	0.0%	0.0%	4.2%	12.5%	19.2%	2.9%	25.0%
N/A	22.8%	16.7%	42.9%	29.2%	8.3%	15.4%	20.6%	33.3%
No Response	8.9%	8.3%	21.4%	12.5%	12.5%	7.7%	5.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 27: Sectors with which Respondents or their Institution Established New Relationships as a Result of the Regional Network by Professional Sector					
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
Higher Education	43.7%	46.6%	44.6%	40.0%	31.3%
K-12 Education	38.6%	53.4%	31.1%	30.0%	25.0%
Private Industry	25.3%	37.9%	20.3%	10.0%	12.5%
Other	10.1%	13.8%	6.8%	0.0%	18.8%
N/A	22.8%	19.0%	20.3%	50.0%	31.3%
No Response	8.9%	3.4%	10.8%	10.0%	18.8%
N	*158*	*58*	*74*	*10*	*16*

Focus of New Relationships:

Tables 28 and 29 show respondents' views on the focus of the new relationships that were formed as a result of the Networks. Note that respondents could choose all options. As a result percentages in each column may add up to more than 100%. Statewide, most of the new relationships formed concerned Network-based projects or activities (39%) or a Regional Network in general (29%). However, almost 22% of respondents reported that the new relationship did involve a non-Network based project or activity (usually STEM oriented). A large percentage of respondents (41%) either did not answer the question, or chose "N/A" or "Don't Know."

Table 28: Focus of New, Network-founded Relationships by Region							
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**
A Network-based project or activity	39.2%	41.7%	0.0%	29.2%	45.8%	46.2%	61.8%	25.0%
The Network in general	28.5%	25.0%	21.4%	12.5%	25.0%	46.2%	38.2%	20.8%
A non-Network, STEM project or activity	17.7%	25.0%	14.3%	33.3%	8.3%	11.5%	23.5%	8.3%
A non-Network, non-STEM project or activity	3.8%	0.0%	0.0%	4.2%	8.3%	3.8%	2.9%	4.2%
Other	3.2%	0.0%	0.0%	12.5%	0.0%	7.7%	0.0%	0.0%
Don't Know	6.3%	8.3%	7.1%	0.0%	16.7%	3.8%	0.0%	12.5%
N/A	25.9%	25.0%	42.9%	25.0%	8.3%	23.1%	20.6%	45.8%
No Response	8.9%	8.3%	21.4%	12.5%	12.5%	7.7%	5.9%	0.0%
N	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*

Table 29: Focus of New, Network-founded Relationships by Professional Sector				
	Statewide	**Higher Education**	**K-12 Education**	**Private Industry**	**Other**
A Network-based project or activity	39.2%	48.3%	33.8%	30.0%	37.5%
The Network in general	28.5%	41.4%	23.0%	20.0%	12.5%
A non-Network, STEM project or activity	17.7%	19.0%	18.9%	20.0%	6.3%
A non-Network, non-STEM project or activity	3.8%	3.4%	5.4%	0.0%	0.0%
Other	3.2%	1.7%	2.7%	0.0%	12.5%
Don't Know	6.3%	6.9%	8.1%	0.0%	0.0%
N/A	25.9%	24.1%	23.0%	40.0%	37.5%
No Response	8.9%	3.4%	10.8%	10.0%	18.8%
N	*158*	*58*	*74*	*10*	*16*

Sustainability of New Relationships:

As a follow-up to asking with which sectors respondents or their institutions had formed new relationships, respondents were asked the degree to which it was likely those relationships would have formed without their Regional Network. Figures 8 and 9 show responses on a scale of "very likely," "somewhat likely," "somewhat unlikely," and "very unlikely." Statewide, 36% of respondents thought it was somewhat or very unlikely that the new relationships would have formed without the Network, while 29% of respondents thought it was somewhat or very likely that the new relationships would have formed without the Network. Higher education respondents were more likely (43%) to think it was somewhat or very unlikely that the new relationships would have formed without the Networks.

Figure 8: Likelihood of New Relationships Having Formed Without the Network by Region (N = 158)

Figure 9: Likelihood of New Relationships Having Formed Without the Network by Sector (N = 158)
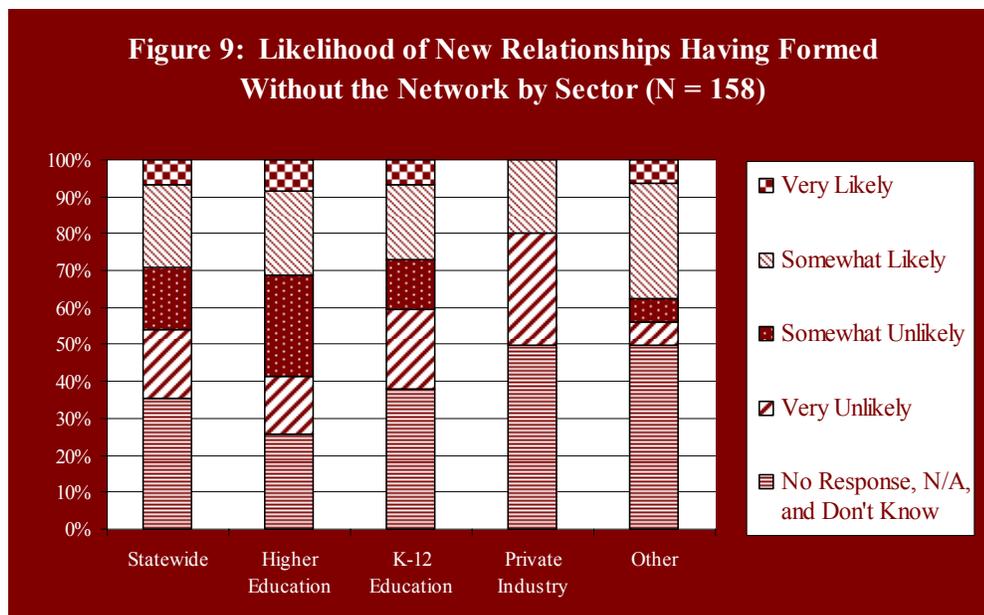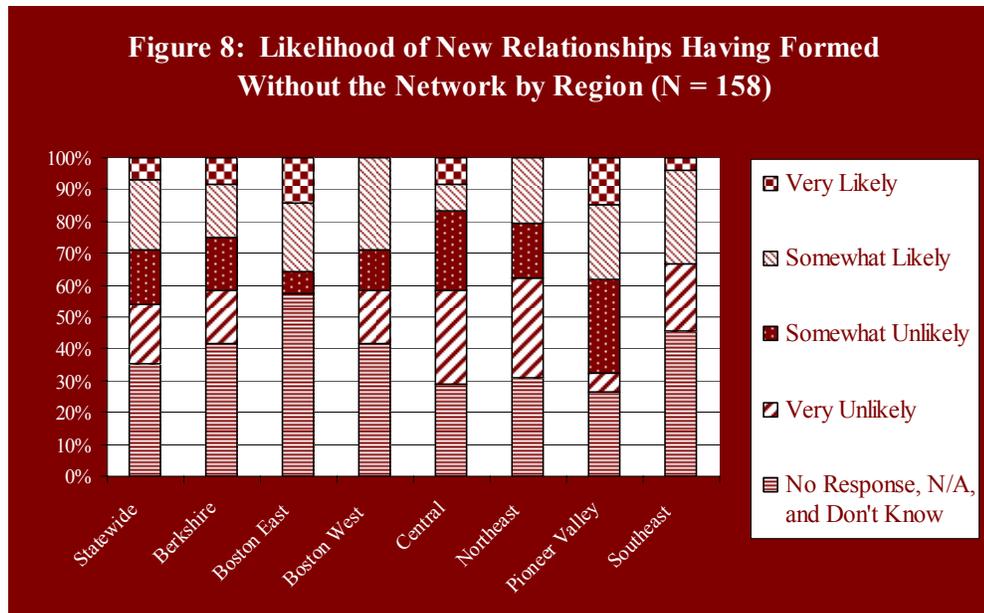
Respondents were also asked to assess the likelihood that the new relationships would continue without their Regional Network. Figures 10 and 11 show the distribution of these responses. Statewide, approximately 32% of respondents thought it was somewhat or very likely that their new relationships would continue without the Network as opposed to 31% who thought continuation was somewhat or very unlikely. Overall, almost 37% of respondents either did not answer the question, or chose "N/A" or "Don't Know."

Figure 10: Likelihood of New Relationships Continuing Without the Network by Region (N = 158)

Figure 11: Likelihood of New Relationships Continuing Without the Network by Sector (N = 158)
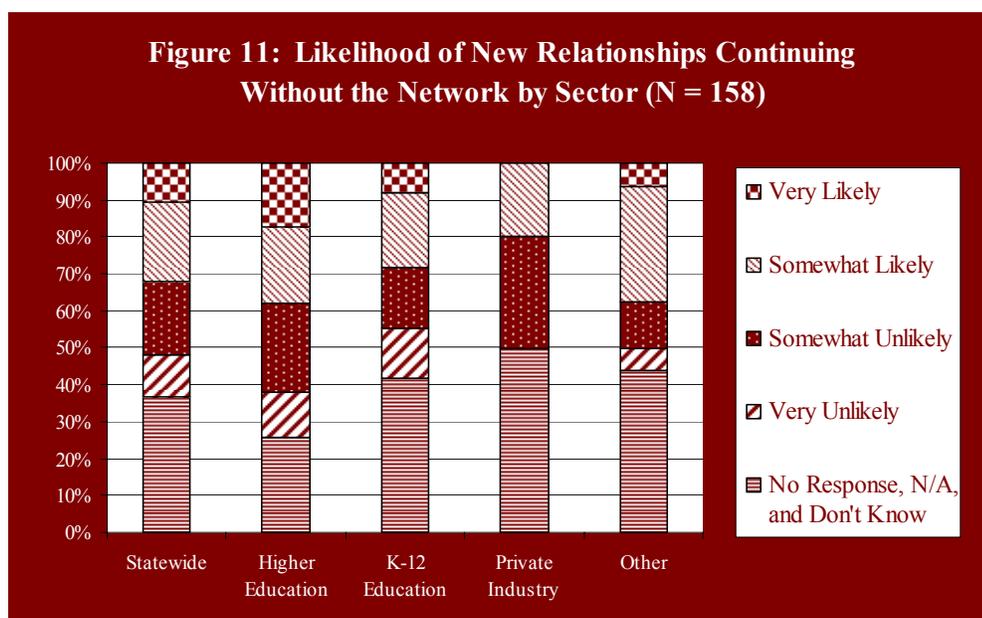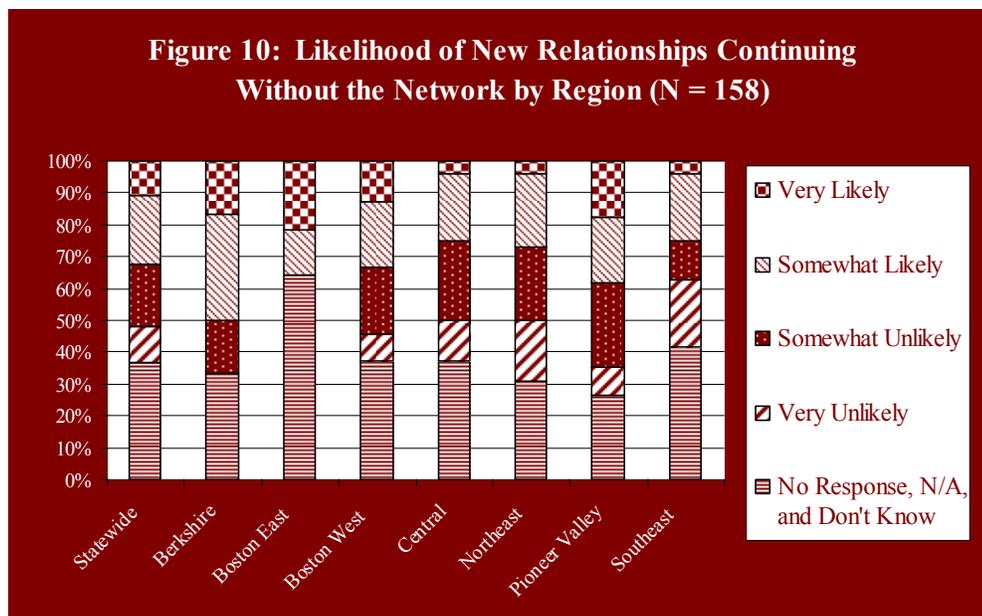
As one perspective on the sustainability of the Regional PreK-16 Networks, and as a lead-in to the open-ended questions that concluded the survey, respondents were asked to what degree they thought it was likely that their Network would continue without support from the Legislature. Figures 12 and 13 show the distribution of these responses. Statewide, 18% of respondents thought it was somewhat or very likely that their Network would continue past this year without Legislative support (ranging from about 9% to 29% among individual Networks) while 47% thought it was somewhat or very unlikely their Network would continue (ranging from 29% to 65%). Overall, about 34% of respondents either did not answer the question, or chose "N/A" or "Don't Know."

Figure 12: Likelihood of Network Continuing Without Legislative Support by Region (N = 158)
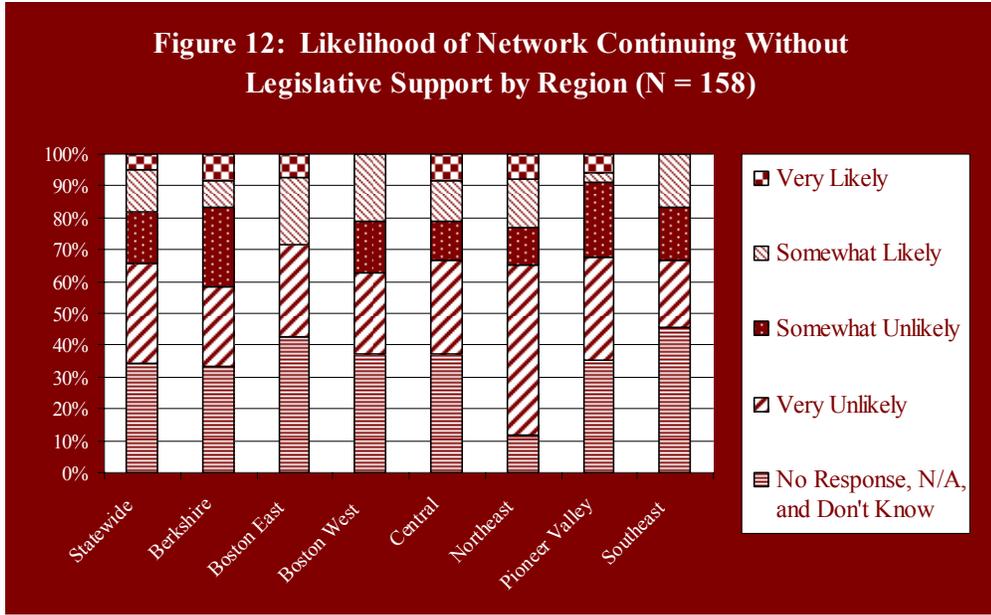
Figure 13: Likelihood of Network Continuing Without Legislative Support by Sector (N = 158)
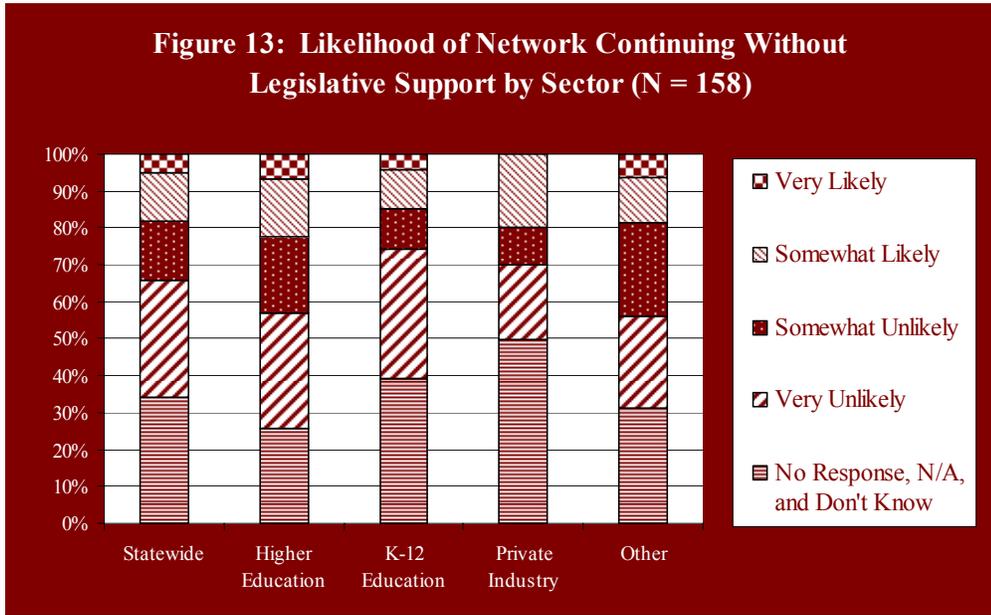
Results Part V: Open-Ended Comments

The survey concluded with three open-ended questions. An overview of the responses that were given will be discussed here. To read all of the individual comments please see Appendix F.

Value of Pipeline Funding:

The first open-ended question asked, "In your opinion, has the establishment of the Pipeline Fund Regional PreK-16 Networks been money well spent?" Responses to this question were broken down into the following categories:

1)	Yes with examples	(44 responses)
2)	Yes	(34 responses)
3)	Yes with qualifications	(22 responses)
4)	No with qualifications	(10 responses)
5)	No	(2 responses)
6)	No with examples	(1 response)
7)	Other comments	(15 responses)

Themes that emerged among comments categorized as "yes with examples" included descriptions of Network-specific programs and the ways in which they had affected student and/or teacher participants; positive statements about networking and partnership-building opportunities that emerged as a result of a Regional Network; and, the importance of information-sharing and/or planning that occurred as part of a Regional Network. Common qualifications that were made to otherwise "yes" responses involved issues of funding (was limited, needs to continue); time (program/projects still in the formative stage, need more support over several years); cross-Network collaboration (limited); curriculum (more PD offerings); and, motivation (lots needed).

Comments from respondents who indicated the money was not well spent included concerns about lack of planning and motivation; political jockeying among Network leaders; lack of innovation in material and approach; and, projects/approaches being higher education centered.

Network Institutionalization Needs:

The second open-ended question asked "In your opinion, what is needed for your Pipeline Fund Regional PreK-16 Network to become an institutionalized presence?" Responses to this question were categorized using the following key words:

1)	Funding	(51 responses)
2)	Connections	(29 responses)
3)	Planning	(12 responses)
4)	Staff	(12 responses)
5)	Time	(12 responses)
6)	Other comments	(30 responses)

The most commonly mentioned need for Networks to become institutionalized was funding. Respondents identified several specific uses for funding: long-range planning; permanent, full-time Network staff; annual

Network meetings; more professional development opportunities for teachers; curriculum realignment for new MCAS standards; and, taking first-year projects further.

The second most commonly mentioned need for institutionalization was associated with various kinds of Network connections across the four primary professional sectors (higher education, K-12 education, private industry, and other). Specific issues identified by respondents included: articulation of four-year college courses with community college courses; better identification of, and direct contact with, the most appropriate K-12 contact person for each individual school district (as opposed to blanket approaches); increased participation by business and industry; increased support from institutions of higher education; increased cross-teaching between high schools and community colleges; better technical support of web-sites and other methods of information-sharing; and, better utilization of existing school-to-career Networks.

Common planning issues that emerged across all of the Networks consisted of strategic/long-term planning, articulation of state-wide objectives, and the development of a meaningful STEM curriculum. Comments focused on staffing issues were centered on the need for full-time, independent, Legislatively-funded staff who could engage in all of the different technical support, public relations, information coordination, and project management tasks that are needed by a Regional Network. Comments focused on time-related issues were usually associated with funding—that it takes anywhere from two to five years for new organizations to establish themselves and that funding needs to be sustained, or at least supplemented, from outside during that period. Comments that were categorized under "other" included a wide range of issues such as the need for demonstrable, documented, positive outcomes from programs; improved public relations (either within individual regions or statewide); and, support for STEM coordinators within schools.

Other Comments:

Under this question, many respondents took the opportunity to make other positive statements about their Network in particular, or the Pipeline initiative in general. Other respondents took the opportunity to make constructive comments about things they thought could be improved including: the need for MCAS science follow-up; the need for activities to fill potential gaps between funding cycles; the need for more engineering and technology (not just science and math) programming; and, the need for better linkages with college math and science departments.

Some difficulties that respondents saw with their Network were also raised. These included that it is hard to find time to participate, or in some cases even to pay attention to emails; that there needs to be better coordination among all STEM projects in an area and their institutions; that Network leaders need to communicate better; and, that involvement is low in some instances.

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Appendix A: Survey Instrument

</div>

Introduction:

The University of Massachusetts Donahue Institute is administering this survey on the behalf of the Massachusetts Board of Higher Education to determine how the Pipeline Fund Regional PreK-16 Networks developed and how individuals participate in these Networks. Your responses will help us describe ways in which the Pipeline Fund Networks formed and now operate.

All responses to this survey are anonymous. Aggregate responses will be shared with the Board of Higher Education and Network leaders; analysis of the results will be shared with members of the Legislature and other interested parties.

If you have any questions, please feel free to contact Jean Supel with the UMass Donahue Institute Research and Evaluation Group at 508-856-1210 or jsupel@donahue.umassp.edu.

Thank you for taking the time to complete this survey.

- -

Survey Page # 1 of 4:

*1. To which Network do you belong?
  - ○ Berkshire
  - ○ Boston East
  - ○ Boston West
  - ○ Central
  - ○ Northeast
  - ○ Pioneer Valley
  - ○ Southeast

*2. Which sector do you represent within the Network?
  - ○ Private Industry
  - ○ Higher Education
  - ○ K-12 education
  - ○ Other (please specify)

3. How many years of experience do you have in the sector you are representing?
  - ○ 15 years or more
  - ○ 10 to 14 years
  - ○ 5 to 9 years
  - ○ 3 to 4 years
  - ○ 2 years of less

---

* Indicates questions which required an answer.

4. How many years of experience do you have with Science, Technology, Engineering, and Math *STEM)
   education issues?
   - ○ 15 years or more
   - ○ 10 to 14 years
   - ○ 5 to 9 years
   - ○ 3 to 4 years
   - ○ 2 years to less

5. What kinds of participation opportunities are available in your Network? (select all that apply)
   - ○ Advisory Committee
   - ○ Steering Committee
   - ○ General Member
   - ○ Network Funded Staff
   - ○ Other (please specify)

*6. In which way(s) do you currently participate in your Network? (select all that apply)
   - ○ Advisory Committee
   - ○ Steering Committee
   - ○ General Member
   - ○ Network Funded Staff
   - ○ Other (please specify)

Survey Page # 2 of 4:

*7. Were you involved in the planning stages of the Network?
   - ○ Yes
   - ○ No

8. The Network was initially organized by… (select all that apply)
   - ○ A single individual
   - ○ A group of individuals
   - ○ Representatives of interested institutions
   - ○ A mix of individuals and representatives
   - ○ Don't Know
   - ○ Other (please specify)

9. How did you come to join the Network? (select all that apply)
   - ○ Joined on my own
   - ○ Joined as a part of a peer group
   - ○ Joined as part of an already-established, smaller Network
   - ○ Asked to join by my employer/institution
   - ○ Invited to join by a Network member/organizer
   - ○ Other (please specify)

10. The Network is currently organized by… (select all that apply)
   - ○ A single individual
   - ○ A group of individuals
   - ○ Representatives of interested institutions
   - ○ Don't Know
   - ○ Other (please specify)

11. The current focus of your Network is on… (select all that apply)
   - ○ Content-oriented teacher development
   - ○ Skill-oriented teacher development
   - ○ Content-oriented student development
   - ○ Skill-oriented student development
   - ○ Don't Know
   - ○ Other (please specify)

12. In your opinion, the focus of your Network should be on… (select all that apply)
   - ○ Content-oriented teacher development
   - ○ Skill-oriented teacher development
   - ○ Content-oriented student development
   - ○ Skill-oriented student development
   - ○ Don't Know
   - ○ Other (please specify)

- -

Survey Page # 3 of 4:

*13. Have you attended at least one Network meeting? (select all that apply)
   - ○ I have not attended a Network Meeting
   - ○ Preliminary Organizational Meeting
   - ○ Advisory Committee Meeting
   - ○ Steering Committee Meeting
   - ○ General Network Meeting
   - ○ Other (please specify)

If you have attended a Network meeting, please answer the following questions.
If you have not attended a meeting, please go to the next survey page.

Please rate the degree to which you agree or disagree with the following statements about Network meetings…

14. I felt comfortable.

Strongly Agree	Generally Agree	Generally Disagree	Strongly Disagree	N/A
○	○	○	○	○

15. I felt my participation was encouraged.

Strongly Agree	Generally Agree	Generally Disagree	Strongly Disagree	N/A
○	○	○	○	○

16. I actively participated in discussion.

Strongly Agree	Generally Agree	Generally Disagree	Strongly Disagree	N/A
○	○	○	○	○

17. I was able to communicate easily with members from other sectors.

Strongly Agree	Generally Agree	Generally Disagree	Strongly Disagree	N/A
○	○	○	○	○

18. I felt others listened to my contribution.

Strongly Agree	Generally Agree	Generally Disagree	Strongly Disagree	N/A
○	○	○	○	○

19. I felt meetings were time well spent.

Strongly Agree	Generally Agree	Generally Disagree	Strongly Disagree	N/A
○	○	○	○	○

- -

Survey Page # 4 of 4:

*20. With which sectors have you or your institution established new relationships as a result of the Network? (select all that apply)
- ○ N/A
- ○ Private Industry
- ○ Higher Education
- ○ K-12 education
- ○ Other (please specify)

*21. The new relationship(s) concern… (select all that apply)
- ○ N/A
- ○ Don't Know
- ○ A Network-based project or activity
- ○ The Network in general
- ○ A non-Network, STEM project or activity
- ○ A non-Network, non-STEM project or activity
- ○ Other (please specify)

22. The likelihood of the new relationship(s) having formed without the Network is…

Very Likely	Somewhat Likely	Somewhat Unlikely	Very Unlikely	Don't Know	N/A
○	○	○	○	○	○

23. The likelihood of the new relationship(s) continuing without the Network is…

Very Likely	Somewhat Likely	Somewhat Unlikely	Very Unlikely	Don't Know	N/A
○	○	○	○	○	○

24. The likelihood of your Network continuing past this year without support from the Legislature is…

Very Likely	Somewhat Likely	Somewhat Unlikely	Very Unlikely	Don't Know	N/A
○	○	○	○	○	○

25. In your opinion, has the establishment of the Pipeline Fund Regional PreK-16 Networks been money well spent?

26. In your opinion, what is needed for your Pipeline Fund Regional PreK-16 Network to become an institutionalized presence?

27. Please add any other comments you might have about the organization of your Network or your participation:

— -- — -- — -- — -- — -- — -- — -- — -- — -- — -- — -- — -- — -- — -- — -- — -- —

Conclusion:

Thank you again for contributing to this survey.

I hope you have an enjoyable summer!

Sincerely,

Jean Supel
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UMass Donahue Institute
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Shrewsbury, MA 01545
Phone: 508-856-1210
Fax: 508-856-1218
Email: jsupel@donahue.umassp.edu

Appendix B: Results for Methodology and Respondent Characteristics

Question 1: To Which Network do you belong? *[required an answer]*												
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**	**Higher Educ.**	**K-12 Educ.**	**Private Ind.**	**Other**
Berkshire	12								4	6	1	1
Boston East	14								5	5	2	2
Boston West	24								5	11	3	5
Central	24								7	14	2	1
Northeast	26								6	18	0	2
Pioneer Valley	34								19	11	1	3
Southeast	24								12	9	1	2
# of Respondents	*158*								*58*	*74*	*10*	*16*
Question 2: Which sector do you represent within the Network? *[required an answer]*												
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**	**Higher Educ.**	**K-12 Educ.**	**Private Ind.**	**Other**
Higher Education	58	4	5	5	7	6	19	12				
K-12 Education	74	6	5	11	14	18	11	9				
Private Industry	10	1	2	3	2	0	1	1				
Other	16	1	2	5	1	2	3	2				
# of Respondents	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*				
Question 3: How many years of experience do you have in the sector you are representing?												
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**	**Higher Educ.**	**K-12 Educ.**	**Private Ind.**	**Other**
15 or more	66	7	5	11	10	8	14	11	19	39	4	4
10 to 14	29	2	3	4	4	5	5	6	16	7	2	4
5 to 9	29	2	2	3	4	7	7	4	11	10	3	5
3 to 4	12	1	2	2	1	4	2	0	4	7	0	1
2 or less	20	0	2	3	5	2	5	3	7	11	0	2
# of Respondents	*156*	*12*	*14*	*23*	*24*	*26*	*33*	*24*	*57*	*74*	*9*	*16*
No Response	*2*	*0*	*0*	*1*	*0*	*0*	*1*	*0*	*1*	*0*	*1*	*0*

UMass Donahue Institute
Research and Evaluation Group

Question 4: How many years of experience do you have with Science, Technology, Engineering, and Math (STEM) education issues?												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
15 or more	48	2	5	5	7	10	11	8	17	26	2	3
10 to 14	26	1	2	2	5	3	11	2	9	14	1	2
5 to 9	30	5	2	7	2	5	5	4	13	11	1	5
3 to 4	17	2	1	2	2	3	3	4	7	6	1	3
2 or less	35	2	4	7	8	5	4	5	12	17	3	3
# of Respondents	*156*	*12*	*14*	*23*	*24*	*26*	*34*	*23*	*58*	*74*	*8*	*16*
No Response	*2*	*0*	*0*	*1*	*0*	*0*	*0*	*1*	*0*	*0*	*2*	*0*

Appendix C: Results for Participation Characteristics

Question 5: What kinds of participation opportunities are available in your Network? (select all that apply)												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Advisory Committee	78	6	7	11	13	11	19	11	37	24	8	9
Steering Committee	58	7	4	6	11	12	13	5	26	20	6	6
General Member	118	7	11	19	18	21	32	10	43	54	6	15
Network Funded Staff	41	5	4	4	7	7	12	2	24	1	2	5
Other	22	2	0	3	5	5	4	3	10	9	0	3
Don't Know	9	0	0	1	1	0	0	7	4	4	0	1
# of Respondents	*150*	*9*	*14*	*23*	*23*	*25*	*34*	*22*	*57*	*69*	*8*	*16*
No Response	*8*	*3*	*0*	*1*	*1*	*1*	*0*	*2*	*1*	*5*	*2*	*0*

Question 6: In which way(s) do you currently participate in your Network? (select all that apply) *[required an answer]*												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Advisory Committee	40	4	4	5	7	6	7	7	17	15	5	3
Steering Committee	32	6	1	5	5	10	1	4	15	10	4	3
General Member	110	9	11	19	16	14	27	14	40	53	4	13
Network Funded Staff	13	1	2	2	2	3	3	0	7	2	1	3
Other	27	2	0	3	4	7	8	3	9	11	1	6
Don't Know	6	0	0	1	1	0	0	4	3	3	0	0
# of Respondents	*158*	*12*	*14*	*24*	*24*	*26*	*34*	*24*	*58*	*74*	*10*	*16*

Question 7: Were you involved in the planning stages of the Network? *[required an answer]*												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Yes	71	8	5	8	11	12	18	9	37	22	4	8
No	77	3	7	13	11	13	15	15	20	46	5	6
# of Respondents	*148*	*11*	*12*	*21*	*22*	*25*	*33*	*24*	*57*	*68*	*9*	*14*
No Response	*10*	*1*	*2*	*3*	*2*	*1*	*1*	*0*	*1*	*6*	*1*	*2*

Question 9: How did you come to join the Network? (select all that apply)												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Joined on my own	23	1	2	5	2	2	6	5	9	9	3	2
Joined as part of a peer group	8	1	0	1	0	1	4	1	4	3	0	1
Joined as part of an already-established, smaller Network	21	2	1	5	2	2	5	4	12	6	0	3
Asked to join by my employer/institution	55	4	3	5	10	16	9	8	20	29	3	3
Invited to join by a Network member/ organizer	54	5	4	7	9	8	13	8	18	22	4	10
Other	4	0	0	1	1	0	1	1	0	4	0	0
Don't Know	3	0	1	1	0	0	0	1	1	2	0	0
# of Respondents	*146*	*11*	*11*	*20*	*22*	*25*	*33*	*24*	*56*	*68*	*8*	*14*
No Response	*12*	*1*	*3*	*4*	*2*	*1*	*1*	*0*	*2*	*6*	*2*	*2*

Question 13: Have you attended at least one Network meeting? (select all that apply) *[required an answer]*												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
I have not attended a Network meeting	29	1	4	2	6	0	7	9	9	17	1	2
Preliminary Organizational meeting	68	9	5	7	10	12	14	11	33	22	4	9
Advisory Committee meeting	47	4	4	6	7	10	9	7	21	17	5	4
Steering Committee meeting	35	4	2	7	4	13	3	2	16	10	4	5
General Network meeting	92	7	6	17	12	19	21	9	35	39	6	12
Other	9	1	1	1	1	1	1	3	5	2	0	2
# of Respondents	*147*	*11*	*12*	*21*	*22*	*24*	*33*	*24*	*57*	*67*	*9*	*14*
No Response	*11*	*1*	*2*	*3*	*2*	*2*	*1*	*0*	*1*	*7*	*1*	*2*

Questions 14-19: If you have attended a Network meeting, rate the degree to which you agree or disagree with the following statements about Network meetings…												
Question 14: I felt comfortable.												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Strongly Agree	56	7	5	9	7	12	12	4	25	22	4	5
Generally Agree	53	3	3	9	7	12	10	9	18	25	3	7
Generally Disagree	4	0	0	0	0	0	2	2	3	1	0	0
Strongly Disagree	0	0	0	0	0	0	0	0	0	0	0	0
N/A	1	0	0	0	0	0	0	1	1	0	0	0
# of Respondents	*114*	*10*	*8*	*18*	*14*	*24*	*24*	*16*	*47*	*48*	*7*	*12*
No Response	*44*	*2*	*6*	*6*	*10*	*2*	*10*	*8*	*11*	*26*	*3*	*4*
Question 15: I felt my participation was encouraged.												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Strongly Agree	57	8	5	9	10	13	8	4	26	23	5	3
Generally Agree	45	2	3	7	4	9	14	6	15	20	2	8
Generally Disagree	10	0	0	2	0	2	2	4	4	5	0	1
Strongly Disagree	0	0	0	0	0	0	0	0	0	0	0	0
N/A	1	0	0	0	0	0	0	1	1	0	0	0
# of Respondents	*113*	*10*	*8*	*18*	*14*	*24*	*24*	*15*	*46*	*48*	*7*	*12*
No Response	*45*	*2*	*6*	*6*	*10*	*2*	*10*	*9*	*12*	*26*	*3*	*4*
Question 16: I actively participated in discussion.												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Strongly Agree	48	6	4	5	8	13	7	5	21	20	5	2
Generally Agree	49	4	4	9	5	10	12	5	18	20	2	9
Generally Disagree	10	0	0	3	1	1	1	4	4	5	0	1
Strongly Disagree	1	0	0	0	0	0	1	0	1	0	0	0
N/A	4	0	0	0	0	0	2	2	2	2	0	0
# of Respondents	*112*	*10*	*8*	*17*	*14*	*24*	*23*	*16*	*46*	*47*	*7*	*12*
No Response	*46*	*2*	*6*	*7*	*10*	*2*	*11*	*8*	*12*	*27*	*3*	*4*

Question 17: I was able to communicate easily with members from other sectors.												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Strongly Agree	56	5	5	6	9	19	8	4	23	25	3	5
Generally Agree	41	4	3	8	4	2	13	7	17	14	3	7
Generally Disagree	11	1	0	1	1	3	2	3	5	6	0	0
Strongly Disagree	1	0	0	1	0	0	0	0	0	0	1	0
N/A	3	0	0	2	0	0	0	1	1	2	0	0
# of Respondents	*112*	*10*	*8*	*18*	*14*	*24*	*23*	*15*	*46*	*47*	*7*	*12*
No Response	*46*	*2*	*6*	*6*	*10*	*2*	*11*	*9*	*12*	*27*	*3*	*4*

Question 18: I felt others listened to my contributions.												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Strongly Agree	45	5	4	2	8	14	7	5	19	20	3	3
Generally Agree	51	4	4	13	6	7	12	5	21	18	4	8
Generally Disagree	8	1	0	1	0	2	2	2	4	3	0	0
Strongly Disagree	1	0	0	0	0	0	0	1	1	0	0	0
N/A	6	0	0	2	0	0	2	2	2	4	0	0
# of Respondents	*112*	*10*	*8*	*18*	*14*	*23*	*23*	*15*	*47*	*45*	*7*	*11*
No Response	*46*	*2*	*6*	*6*	*10*	*3*	*11*	*9*	*11*	*29*	*3*	*3*

Question 19: I felt meetings were time well spent.												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Strongly Agree	32	5	2	5	5	8	5	2	15	12	3	2
Generally Agree	64	4	6	8	9	13	16	8	25	26	4	9
Generally Disagree	13	1	0	4	0	3	2	3	4	8	0	1
Strongly Disagree	2	0	0	0	0	0	1	1	2	0	0	0
N/A	2	0	0	1	0	0	0	1	1	1	0	0
# of Respondents	*113*	*10*	*8*	*18*	*14*	*24*	*24*	*15*	*47*	*47*	*7*	*12*
No Response	*45*	*2*	*6*	*6*	*10*	*2*	*10*	*9*	*11*	*27*	*3*	*4*

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Appendix D: Results for Network Organization

Question 8: The Network was initially organized by… (select all that apply)												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
A single individual	2	0	0	1	0	0	0	1	1	0	1	0
A group of individuals	27	4	2	2	6	6	3	4	11	15	0	1
Representatives of interested institutions	59	3	3	7	10	13	14	9	25	24	2	8
A mix of individuals and representatives	48	7	4	5	10	8	9	5	23	19	2	4
Don't know	45	2	3	9	7	3	12	9	11	27	4	3
Other	2	0	0	0	0	0	0	2	0	1	0	1
# of Respondents	*146*	*11*	*11*	*20*	*22*	*25*	*33*	*24*	*56*	*68*	*8*	*14*
No Response	*12*	*1*	*3*	*4*	*2*	*1*	*1*	*0*	*2*	*6*	*2*	*2*
Question 10: The Network is currently organized by… (select all that apply)												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
A single individual	7	1	0	3	2	0	0	1	2	3	0	2
A group of individuals	42	3	5	5	9	8	10	2	17	20	3	2
Representatives of interested institutions	75	7	4	13	7	18	17	9	29	32	4	10
Don't know	36	3	3	3	6	2	9	10	11	21	3	1
Other	4	0	0	0	0	1	0	3	2	1	0	1
# of Respondents	*145*	*11*	*11*	*20*	*21*	*25*	*33*	*24*	*56*	*68*	*8*	*13*
No Response	*13*	*1*	*3*	*4*	*3*	*1*	*1*	*0*	*2*	*6*	*2*	*3*

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Question 11: The current focus of your Network is on… (select all that apply)											
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Content-oriented teacher development	99	7	4	13	21	19	28	7	40	45	5	9
Skill-oriented teacher development	76	6	5	12	16	16	17	4	29	64	4	9
Content-oriented student development	69	8	4	7	13	12	16	9	27	31	4	7
Skill-oriented student development	54	8	3	10	10	7	8	8	21	23	4	6
Don't know	22	2	2	4	0	2	3	9	7	12	2	1
Other	15	1	4	4	0	3	2	1	8	3	1	3
# of Respondents	*145*	*11*	*11*	*20*	*22*	*25*	*33*	*23*	*56*	*67*	*8*	*14*
No Response	*13*	*1*	*3*	*4*	*2*	*1*	*1*	*1*	*2*	*7*	*2*	*2*

Question 12: In your opinion, the focus of your Network should be on… (select all that apply)											
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
Content-oriented teacher development	118	10	8	16	20	17	31	16	49	53	7	9
Skill-oriented teacher development	91	8	7	13	18	14	20	11	39	40	6	6
Content-oriented student development	83	9	8	10	14	10	20	12	34	36	6	7
Skill-oriented student development	69	8	6	10	14	7	15	9	28	30	6	5
Don't know	6	1	1	1	0	1	0	2	2	3	0	1
Other	19	0	3	4	2	4	3	3	7	4	1	7
# of Respondents	*146*	*11*	*12*	*20*	*22*	*24*	*33*	*24*	*57*	*67*	*8*	*14*
No Response	*12*	*1*	*2*	*4*	*2*	*2*	*1*	*0*	*1*	*7*	*2*	*2*

Appendix E: Results for Network Relationships

Question 20: With which sectors have you or your institution established new relationships as a result of the Network? (select all that apply) *[required an answer]*												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
N/A	36	2	6	7	2	4	7	8	11	15	5	5
Private Industry	40	6	2	4	12	11	5	0	22	15	1	2
Higher Education	69	7	4	10	5	14	18	11	27	33	4	5
K-12 Education	61	5	2	7	12	14	17	4	31	23	3	4
Other	16	0	0	1	3	5	1	6	8	5	0	3
# of Respondents	*144*	*11*	*11*	*21*	*21*	*24*	*32*	*24*	*56*	*66*	*9*	*13*
No Response	*14*	*1*	*3*	*3*	*3*	*2*	*2*	*0*	*2*	*8*	*1*	*3*

Question 21: The new relationship(s) concern… (select all that apply)												
	Statewide	Berkshire	Boston East	Boston West	Central	Northeast	Pioneer Valley	Southeast	Higher Educ.	K-12 Educ.	Private Ind.	Other
N/A	41	3	6	6	2	6	7	11	14	17	4	6
Don't know	10	1	1	0	4	1	0	3	4	6	0	0
A Network-based project or activity	62	5	0	7	11	12	21	6	28	25	3	6
The Network in general	45	3	3	3	6	12	13	5	24	17	2	2
A non-Network, STEM project or activity	28	3	2	8	2	3	8	2	11	14	2	1
A non-Network, non-STEM project or activity	6	0	0	1	2	1	1	1	2	4	0	0
Other	5	0	0	3	0	2	0	0	1	2	0	2
# of Respondents	*144*	*11*	*11*	*21*	*21*	*24*	*32*	*24*	*56*	*66*	*9*	*13*
No Response	*14*	*1*	*3*	*3*	*3*	*2*	*2*	*0*	*2*	*8*	*1*	*3*

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Question 22: The likelihood of the new relationship(s) having formed without the Network is…												
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**	**Higher Educ.**	**K-12 Educ.**	**Private Ind.**	**Other**
Very Likely	11	1	2	0	2	0	5	1	5	5	0	1
Somewhat Likely	35	2	3	7	2	6	8	7	13	15	2	5
Somewhat Unlikely	27	2	1	3	6	5	10	0	16	10	0	1
Very Unlikely	29	2	0	4	7	9	2	5	9	16	3	1
Don't know	1	1	1	1	3	0	1	5	6	6	0	0
N/A	26	2	3	5	1	4	6	5	7	11	3	5
# of Respondents	*140*	*10*	*10*	*20*	*21*	*24*	*32*	*23*	*56*	*63*	*8*	*13*
No Response	*18*	*2*	*4*	*4*	*3*	*2*	*2*	*1*	*2*	*11*	*2*	*3*

Question 23: The likelihood of the new relationship(s) continuing without the Network is…												
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**	**Higher Educ.**	**K-12 Educ.**	**Private Ind.**	**Other**
Very Likely	17	2	3	3	1	1	6	1	10	6	0	1
Somewhat Likely	34	4	2	5	5	6	7	5	12	15	2	5
Somewhat Unlikely	3	2	0	5	6	6	9	3	14	12	3	2
Very Unlikely	8	0	0	2	3	5	3	5	7	10	0	1
Don't know	15	1	2	0	5	1	2	4	7	8	0	0
N/A	24	1	3	5	1	4	5	5	6	11	3	4
# of Respondents	*139*	*10*	*10*	*20*	*21*	*23*	*32*	*23*	*56*	*62*	*8*	*13*
No Response	*19*	*2*	*4*	*4*	*3*	*3*	*2*	*1*	*2*	*12*	*2*	*3*

Question 24: The likelihood of your Network continuing past this year without support from the Legislature is…												
	Statewide	**Berkshire**	**Boston East**	**Boston West**	**Central**	**Northeast**	**Pioneer Valley**	**Southeast**	**Higher Educ.**	**K-12 Educ.**	**Private Ind.**	**Other**
Very Likely	8	1	1	0	2	2	2	0	4	3	0	1
Somewhat Likely	21	1	3	5	3	4	1	4	9	8	2	2
Somewhat Unlikely	25	3	0	4	3	3	8	4	12	8	1	4
Very Unlikely	50	3	4	6	7	14	11	5	18	26	2	4
Don't know	25	1	1	4	6	0	7	6	11	12	1	1
N/A	11	1	1	1	0	1	3	4	2	6	2	1
# of Respondents	*140*	*10*	*10*	*20*	*21*	*24*	*32*	*23*	*56*	*63*	*8*	*13*
No Response	*18*	*2*	*4*	*4*	*3*	*2*	*2*	*1*	*2*	*11*	*2*	*3*

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