MARCH 11, 2021

SURVEY OF MASSACHUSETTS MUNICIPALITIES

IMPACTS OF COVID-19 AND RECOVERY STRATEGIES

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Report prepared by a team of researchers at the **University of Massachusetts Amherst** with the support of the *Massachusetts Municipal Association (MMA)*.

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March 11, 2021

Executive Summary

SURVEY RESULTS

IMPACTS OF COVID-19 AND RECOVERY STRATEGIES

he UMass Amherst School of Public Policy's Socioeconomic Policy Lab conducted an online survey from February 22, 2021 to March 2, 2021 with support from the Massachusetts Municipal Association (MMA). The purpose of this survey is to gather information about the challenges municipalities are facing because of the COVID-19 public health crisis and its socio-economic fallout, the strategies adopted to address these challenges, and issues currently prioritized by municipal leaders. The survey includes questions on eight areas:

- Impacts on municipal operations
- 2. Strategies adopted by municipalities in their emergency response and current priorities
- 3. Funding and financial impacts on municipal budgets
- 4. Vaccine preparedness, planning, and best practices
- 5. Equity indicators used in monitoring the impacts of the COVID-19 crisis
- 6. Impacts on vulnerable populations, particularly regarding food and housing security
- 7. Impacts on local businesses
- 8. Possible strategies for an inclusive and sustainable post-COVID socio-economic recovery

The survey was distributed online by the MMA to the municipal leaders of each of Massachusetts' 351 municipalities, of which 117 answered the survey (Fig 1). The percentage of cities (as opposed to towns) among the municipalities which answered the survey is slightly higher compared to Massachusetts as a whole. However, the characteristics of municipalities in the sample are comparable to municipalities in the

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entire Massachusetts in terms of percentage of communities defined as "rural level 1" and "rural level 2", average municipal per capita income, and population size (Table 1).

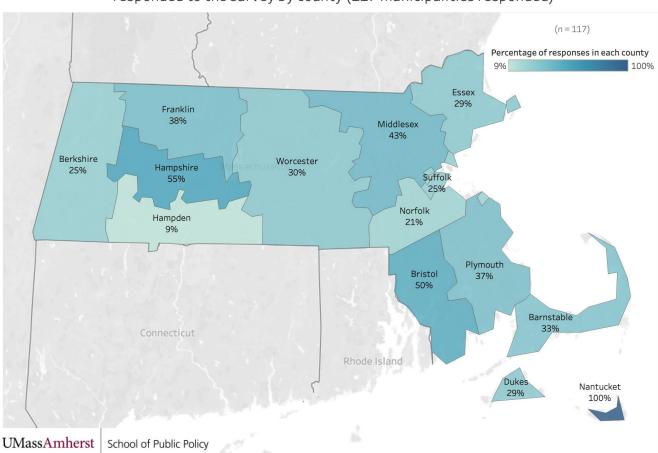


Figure 1. Massachusetts map showing the percentage of municipalities that responded to the survey by county (117 municipalities responded)

¹ Massachusetts State Office of Rural Health, List of Rural Towns: https://www.mass.gov/doc/massachusetts-rural-towns-list/download

Table 1. Characteristics of municipalities				
	Massachusetts		Sample in this study	
	351 municipalities		117 municipalities	
	Count Percent of Total		Count	Percent of Total
Number of cities	39	11%	24	21%
Number of towns	312	89%	93	79%
Not rural	191	54%	68	58%
Rural level 1	104	30%	32	27%
Rural level 2	56	16%	17	15%
Average municipal per capita income	\$42,194		\$	43,592
Average municipal population size		19,664	_	17,742

KEY FINDINGS

1. IMPACTS ON CITY/TOWN OPERATIONS

- The majority of Massachusetts municipalities reported significant to extreme impacts of COVID-19 on municipal operations (78%) and local economies since March 2020 (65%). (Tables 2 and 3)
- More than 90% of municipalities reported moderate to severe impacts associated with COVID-19 in terms of restrictions of in-person access or complete closure of the town/city hall. (Fig. 2)
- More than 90% of municipalities reported moderate to severe impacts associated with COVID-19 in terms of transition to school remote or hybrid learning. (Fig. 2)
- Between 70-85% of municipalities reported moderate to severe impacts in the following areas: increase in overall daily operations, delays in decision-making, and municipal budget/finance challenges. (Fig. 2)
- More than 75% of municipalities reported moderate to severe impacts on municipal employees' physical and mental health. (Fig. 2)

2. STRATEGIES AND PRIORITIES

- In response to the challenges of COVID-19, the most frequently adopted organizational strategies include: transitioning to electronic public meetings (97%), enhancing public health and safety protocols to facilitate access to municipal buildings (91%), and adopting or expanding remote working for municipal employees (86%). (Fig. 32)
- 40% of municipalities introduced programs to enhance employees' mental health and wellness. (Fig. 3)
- The top three priority areas of municipalities in relation to COVID-19 are: (1) preparing for vaccine distribution, (2) enhancing public health and safety protocols to facilitate continuity of in-person learning, and (3) addressing municipal budget/finance challenges. (Fig. 4)

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² Some of the questions in our survey (Figure 3, and Tables 4, 5, 7) are drawn from an online survey on COVID-19 conducted by the *International City/County Management Association* (ICMA) in July 2020. Our goal by including these questions was to compare the results obtained by ICMA in July 2020 with the current situation in Massachusetts. https://icma.org/documents/icma-survey-research-covid-19-impacts-local-governments

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- More than 80% of municipalities ranked as moderate to high priority the following: enhancing remote learning capabilities of hybrid models for schools, and addressing food and housing insecurity. (Fig. 4)
- A large majority of municipalities stated that, over the next year, they will adopt a hybrid format between pre-/post-pandemic practices in relation to electronic public meetings, virtual community engagement, remote working for municipal employees, and remote permitting processes. (Fig. 5)

3. FUNDING AND FINANCIAL IMPACTS

- 88% of municipalities have received funding under the CARES Act, with 74% of these municipalities
 using the funding for Public Health expenses (e.g., PPE supplies, disinfection of facilities, technical
 assistance or consulting); and 60% using the funding for compliance with COVID-19 measures (e.g.,
 telework support for employees, paid sick/family medical leave for public employees, distance learning
 technologies for schools). (Table 4)
- A vast array of personnel actions has been taken to mitigate budgeting challenges, including: hiring freezes (37% of municipalities), consolidation of personnel responsibilities and functions (36%), and elimination of unfilled positions (16%). (Table 5)

4. VACCINE PREPAREDNESS

- 60% of municipalities reported that they definitely have the capacity to administer vaccines. (Fig. 6)
- 73% have developed local or regional partnerships with other institutions to support vaccination (e.g., hospitals, higher education institutions, EMS, Councils on Aging). 62% have developed local partnerships with neighboring municipalities. (Table 6)
- 81% have a page on the municipal website providing regular, updated information on vaccinations, 61% have volunteers to assist with vaccination registration and scheduling by phone, and 59% have developed outreach and education programs about COVID-19 and vaccination. (Fig. 7)
- More than 40% of municipalities have developed services to support vaccinations for elderly and vulnerable populations, including: transportation to/from vaccination sites and the ability to provide vaccinations at home. (Fig. 7)
- 75% of municipalities reported having enough financial resources to start vaccine clinics, however 72% indicated that they do not have access to sufficient vaccine supply. (Fig. 9)

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- In response to an open-ended survey question asking what the most helpful resource would be to support municipal vaccine distribution efforts, 63% of respondents identified a larger and more continuous vaccine supply as the most important resource.
- In response to another open-ended question inviting respondents to share additional thoughts or feedback about vaccination planning and implementation in their municipalities, 20% of respondents identified the redirection of vaccines to mass statewide sites (from local/municipal vaccination clinics) as the main impediment to municipal vaccination planning and implementation process. Several respondents reported concerns about equitable access to vaccines in rural vs urban areas of Massachusetts. Some municipalities indicated that they may close their vaccination clinics because of lack of vaccine supply.

5. EQUITY MEASURES

- 74% of municipalities reported using local health statistics to monitor the impacts of COVID-19, 33% are currently monitoring food security metrics, and under 25% are monitoring employment statistics and homeless population indicators. (Fig. 10)
- The data municipalities are using are generally not disaggregated by race and ethnicity. Only 7% of respondents indicated that the data on health statistics they use offer details by race and ethnicity. Less than 3% of respondents have access to data disaggregated by race and ethnicity on employment, food security and homelessness. (Fig. 10)
- 7% of municipalities stated they have racial equity tools or impact assessments to aid in decisions of resource allocation, and 31% are interested in acquiring these tools. (Table 7)

6. FOOD AND HOUSING SECURITY

- 30% of municipalities reported significant to severe impacts of COVID-19 on food insecurity. 74% have invested resources in programs to support food security since March 2020. (Tables 8 and 9)
- 14% of municipalities reported significant to severe impacts of COVID-19 on housing insecurity. 38% have invested resources in programs to support housing security since March 2020. (Tables 8 and 9)
- 40% of municipalities reported that, in the next 6 to 12 months, they would have enough resources to start or continue investing in programs to support food security, while 22% said they could continue or

start investing in programs supporting housing security. (Table 10)

7. BUSINESSES

- About 60% of Massachusetts municipalities reported significant to severe impacts to local businesses associated with the COVID-19 crisis. (Table 11)
- Over 70% of municipalities reported that at least half of hospitality businesses and small businesses had
 to limit operations (Fig. 11). Over 35% of municipalities reported that at least 10% of these business
 categories had to permanently close. (Fig. 12)
- Over 55% of municipalities reported that at least half of retail businesses and service businesses had to limit operations (Fig. 11). Over 25% of municipalities reported that at least 10% of these business categories had to permanently close. (Fig. 12)
- Between 30 to 40% of respondents expect that, in their municipality, more small businesses, hospitality businesses, service businesses, and retail businesses will close permanently because of the COVID-19 pandemic.

8. GREEN RECOVERY

States and municipalities around the US have started exploring possible COVID-19 economic recovery pathways. The expression "green recovery" has emerged to describe policies that push for low-carbon economic growth, prioritizing renewable energy, energy efficiency, green transport, and other environmentally beneficial projects. One of the priorities of green recovery is to generate new, long-lasting jobs quickly to compensate for the job losses resulting from the pandemic and lockdowns.

- 32% of municipalities reported having discussed internally about green recovery strategies.
- Among green recovery strategies, municipalities are most interested in incentives to support energy efficiency (67%), and incentives to invest in climate-resilient infrastructure of transport, communications, water, and energy networks (e.g., enhancing flood protection schemes) (60%). (Fig. 13)
- More than 90% of respondents indicated moderate to strong interest in investments in three additional
 areas: installing more renewable energy capacity; investing in electric vehicle charging infrastructure;
 and Nature-based Solutions (NBS). NBS are green infrastructure strategies that rely on natural or
 modified ecosystems to enhance water security, climate resilience, climate adaptation, and disaster riskreduction. (Fig. 13)

FIGURES AND TABLES

1. IMPACTS ON CITY/TOWN OPERATIONS

Table 2: How would you describe the impacts of COVID-19 on municipal operations since March 2020? (n=117)

Description	Count of Responses	Percent of Total
Extreme	27	23%
Significant	64	55%
Moderate	22	19%
Minor	4	3%
None	0	0%

Table 3: How would you describe the impacts of COVID-19 on the local economy within your municipality since March 2020? (n=116)

Description	Count of Responses	Percent of Total
Extreme	21	18%
Significant	54	47%
Moderate	30	26%
Minor	11	9%
None	0	0%

(n = 114)Impacts Restrictions of in-person access to, or complete 6% closure of, town/city hall and public facilities Transition to remote 5% learning or hybrid models for schools Disruption to local economic activity 19% and private economic development Closure of outdoor 25% 5% public spaces 10% 5% Increase in overall daily operations 24% 5% Delays in budget decision-making and process Municipal budget/finance challenges 27% 24% 5% Impacts on municipal employees' mental health and 23% Delays or cancellation of municipal projects 27% 7% Shifts of resources between departments to satisfy 22% 12% daily operations 50% 8% Impacts on municipal employees' physical health 30% 80% 100% 0% 10% 20% 40% 50% 60% 70% 90% % of Total Respondents Legend UMassAmherst | School of Public Policy Severe Impact Moderate Impact Minor Impact No Impact

Figure 2. Impacts associated with COVID-19 experienced by municipalities

2. STRATEGIES AND PRIORITIES

(n = 116)Adoption of electronic public 97% meetings Enhancement of public health and safety 91% protocols to facilitate access to municipal buildings Adoption or expansion of remote 86% working for municipal employees Other changes to public meetings 82% format and procedures Virtual community engagement 57% 55% Remote permitting Programs to enhance employees' mental health and wellness Programs to enhance employees' physical health 31% 0% 10% 20% 30% 100% % of Total Respondents UMassAmherst | School of Public Policy

Figure 3. Strategies municipalities adopted in response to the COVID-19 crisis

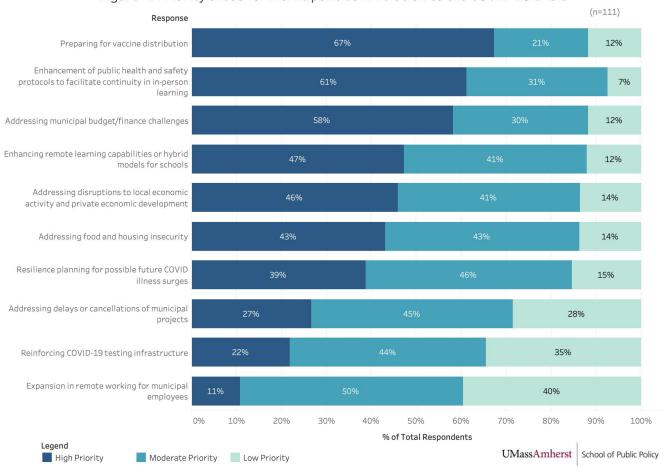
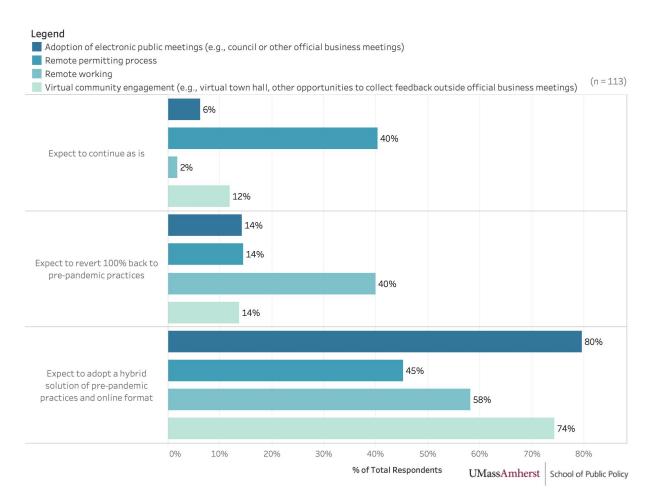


Figure 4. Priority areas for municipalities in relation to the COVID-19 crisis

Figure 5. For any of the following strategies adopted by your municipality in response to the COVID-19 crisis, how do you foresee its use changing over the next year?



3. FUNDING AND FINANCIAL IMPACTS

Table 4: If you have received CARES Act funding, how have these resources been primarily used in your municipality? (n=106)

Description	Count of Responses	Percent of Total Respondents
Public health expenses (e.g. PPE and supplies, disinfection of facilities, technical assistance or consulting)	78	74%
Compliance with COVID-19 public health measures (e.g. telework support for employees, paid sick/family medical leave for public employees, distance learning technologies or process improvements)	64	60%
Payroll expenses for key public personnel (e.g. public works, public health, public safety)	48	45%
Support to vulnerable populations (e.g. food delivery, care of homeless populations, sanitation/safety measures for incarceration facilities, other social and community measures)	30	28%
Medical expenses (e.g. testing, vaccination clinic, existing or temporary facilities)	32	30%

Table 5: Since March 2020, which of the following personnel actions have you taken to mitigate budgeting challenges that have occurred as a result of COVID-19 impacts? (n=92)

Description	Count of Responses	Percent of Total Respondents
Hiring freeze	34	37%
Consolidation of responsibilities/functions	33	36%
Elimination of unfilled positions	15	16%
Salary freezes	9	10%
Furloughs	11	12%
Layoffs	10	11%
Early retirement incentives/packages	2	2%
Temporary pay cuts	3	3%
Reductions of Benefit Contributions	1	1%

4. VACCINE PREPAREDNESS

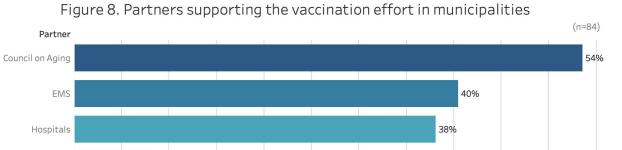
Figure 6. Does your municipality have the ability to administer vaccines?

(n = 110)Definitely yes 60% Probably yes Might or might not 10% Probably not 13% Definitely not 8% 5% 15% 25% 40% 45% 65% 20% % of Total Respondents UMassAmherst School of Public Policy

Table 6: Does your municipality have any of the following? (n = 117)			
	Responses	Percent of Total Responses	
Local or regional partnerships with other institutions to support vaccination (e.g., hospitals, higher education institutions, EMS, Council on Aging)	85	73%	
Volunteer public health board/committee	84	72%	
The physical space to establish a vaccination clinic	78	67%	
Local partnerships with neighboring municipalities	72	62%	
Municipal health department/office operating full-time	68	58%	
Dedicated paid public health worker(s) (nurses and inspectors)	66	56%	
Volunteer public health worker(s)	61	52%	
Funding to hire temporary public health workers	60	51%	
A COVID-19 task-force/committee	58	50%	
Municipal health department/office operating only part-time	26	22%	

(n = 115)A page on the municipal website providing regular updated 81% information on vaccinations Volunteers to assist with 61% vaccination registration and scheduling by phone Outreach and education programs about COVID-19 and 59% vaccinations Transportation to/from 45% vaccination sites Ability to provide vaccinations at 41% home to vulnerable populations A municipal COVID-19 hotline 32% A page on the municipal website offering vaccination registration 30% and scheduling 0% 10% 20% 30% 70% 80% % of Total Respondents UMassAmherst School of Public Policy

Figure 7. What resources for vaccine distribution are available in your municipality?



30%

% of Respondents*

40%

55%

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 $*Among\ those\ who\ indicated\ local\ or\ regional\ partnerships\ in\ Table\ 5.$

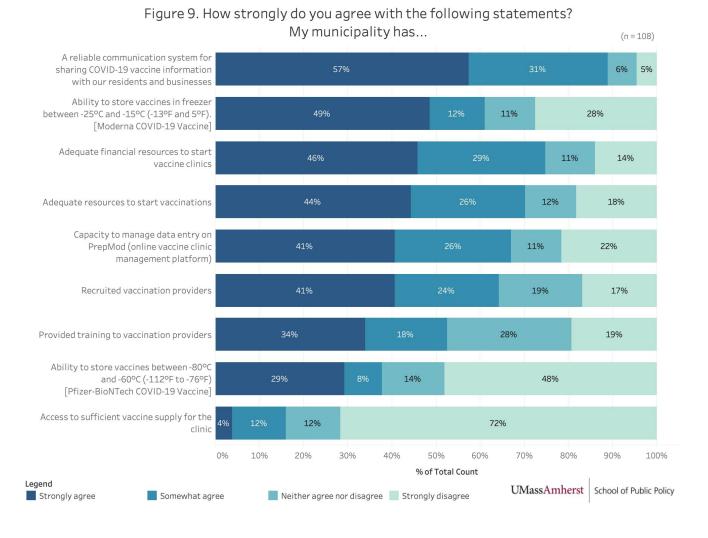
5%

8%

15%

Higher education

institutions



5. EQUITY MEASURES AND INDICATORS

Figure 10. Is your municipality using any of the following types of local data in monitoring impacts of the COVID-19 pandemic?

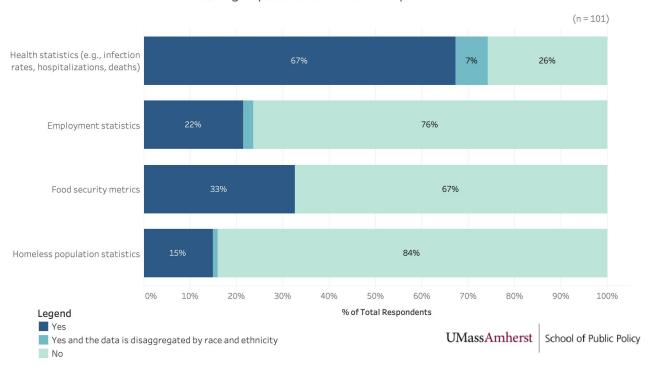


Table 7: Does your local government currently use any racial equity tools or impact assessments in making decisions about allocation of resources? (n = 102)

Answer	Count of Responses	Percent of Total
Yes	7	7%
No, but our municipality is interested in acquiring these tools	32	31%
No	49	48%
Unsure	14	14%

6. FOOD AND HOUSING SECURITY

Table 8: How severely have residents in your municipality been affected by food insecurity, homelessness and housing issues in relation to the COVID-19 crisis? (n = 102)

Answer	Food Insecurity	Homelessness and Housing Issues
Severe Impact	6%	3%
Significant Impact	24%	11%
Moderate Impact	38%	11%
Minor Impact	27%	52%
No Impact	5%	23%

Table 9: Has your municipality invested resources in programs to support housing and food security in relation to the COVID-19 crisis?

(n=106)

Answer	Food security	Housing Security
Yes	74%	38%
No	26%	62%

Table 10: In the next 6 to 12 months, will your municipality have enough resources to start (or continue)			
investing in programs that support housing and food security?			

(n=104)

Answer	Food security	Housing Security
Yes	40%	22%
No	18%	34%
Not sure	42%	44%

7. BUSINESSES

Table 11: How severely have businesses in your municipality been affected by the COVID-19 crisis? (n=107)		
Description	Count of Responses	Percent of Total
Severe impact	17	16%
Significant impact	46	43%
Moderate impact	33	31%
Minor impact	9	8%
No impact	2	2%

Figure 11. Percentage of businesses that had to limit operations, as reported by municipalities

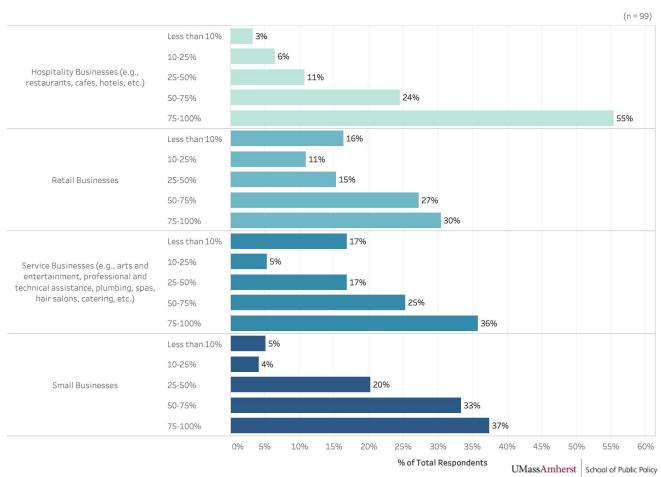
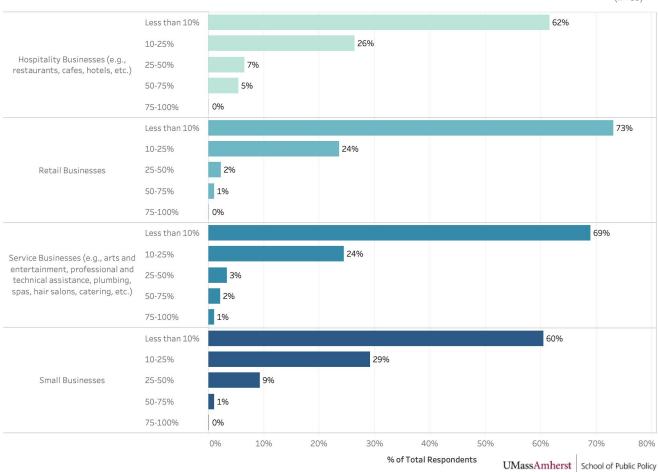


Figure 12. Percentage of businesses that had to stop operations, as reported by municipalities

(n = 99)



8. GREEN RECOVERY

(n=96)Response 67% 31% Support energy efficiency Invest in climate resilient infrastructure of transport, communications, water and energy networks (e.g., 31% 9% enhancing flood protection schemes) 25% Deliver broadband internet infrastructure 20% 6% 40% Install more renewable energy capacity Adopt nature-based solutions to enhance water security, climate resilience, climate adaptation, and disaster risk 8% Invest in electric vehicle charging infrastructure 46% 7% Promote new urban planning and zoning practices that 19% 38% prioritize low-carbon transport and enhance public health standards Purchase a higher percentage of renewable energy for municipal facilities and residents (e.g., via community 45% 13% choice aggregation programs) Upgrade the electric grid to smart grid technology 45% 17% Retrofit housing in low income communities for energy 50% 15% efficiency 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% % of Total Respondents Strong Interest Moderate Interest No Interest UMassAmherst | School of Public Policy

Figure 13. Green recovery strategies of interest to municipalities. Incentives to...