



Office of the NEW YORK STATE

**COMPTROLLER**

## **Cost of Adapting to Climate Change**

**Welcome to the New York State Comptroller's Survey on Local Government Climate Change-Related Expenditures!**

**We invite you to complete this survey to help OSC quantify local government spending to adapt infrastructure to climate change. This includes measures to increase adaptive capacity as well as capital and maintenance projects undertaken to react to climate change-related events (such as more frequent and intense flooding and extreme weather). Our office plans to summarize this information in a report on these challenges.**

**We estimate the survey will require 15-60 minutes to complete and may need input from municipal staff in multiple departments. Where you are unsure of an answer, please enter your best estimate and use the comment boxes to elaborate.**

**Navigate using the Previous/Next buttons. Your responses are automatically saved so you can answer at your own pace - just be sure to click "Done" when you are finished.**

Please provide your contact information so that we can follow up with you if we have questions.

\* Name of local government:

Not listed (please specify):

\* Name (first and last):

\* Title:

\* Email:

\* Phone number:

## Actions to Improve Systemic Resilience

**These actions increase adaptive capacity, meaning they can improve the ability to withstand and recover from a range of hazards, regardless of the specific exposure(s) your local government might face.**

***Note: The balance of this survey will focus on hazard-specific actions, so please use the comment box to expand on any of the topics on this page before moving on.***

**\* From the choices below, please SELECT ALL of the actions your local government has undertaken:**

- Formed or participated in committees meant to guide efforts in your community to address climate change (and its fiscal impacts).
- Adopted building standards intended to address increasing risks related to climate change.
- Initiated a study, inventory, mapping project, planning exercise, database creation or other activity intended to assess climate change risks to physical infrastructure.
- Educated property owners (and/or insurers, developers, lenders) on local climate change risks.
- Adopted climate change adaptation and resiliency standards in planning or zoning regulations or the comprehensive municipal plan.
- Identified public or private resources to provide flood shelters, cooling centers, misting stations, or warming centers during an extreme weather event.
- None of these.

Please use this space to share any additional information on the choices you selected:

## Hazard-Specific Actions

**Hazard-specific actions reduce the impact of a specific hazard or enhance the community's ability to recover from that hazard. Hazards include flooding (inland or coastal), sea level rise, extreme heat, extreme winter weather, drought and erosion.**

***Note: This page presents a summary of the hazard-specific actions as a preview for the next set of ten questions. We will ask about each of them again, individually and in more detail, on the following pages. You should only fill out those pages for which your community has planned, started, or completed a project related to that hazard-specific action.***

**\* From the choices below, please SELECT ALL of the actions your local government has completed in the past five years (2017- 2021) or that you are planning to complete in the next five years (2022-2026):**

- Retrofit, raise, or rebuild municipal buildings to adapt to new climate conditions. Examples include changes to roofs, windows or building envelopes; flood- or other weather-proofing inside the building or on the grounds; purchase of emergency power generators, etc.
- Relocate or demolish municipal buildings, critical facilities, emergency facilities or other critical infrastructure. Examples include municipal buildings, garages, and storage facilities; police and fire stations; correctional facilities; and drinking or wastewater infrastructure such as wells, reservoirs or treatment facilities.
- Rebuild or retrofit critical infrastructure (other than buildings). Examples include infrastructure related to wastewater, drinking water or other municipal utilities.
- Address increased pavement deterioration on road projects.
- Enlarge, replace, or create culverts; or make significant changes to culvert maintenance.
- Replace, build, or raise bridges; or make significant changes to bridge maintenance.
- Build or make significant improvements to other protective structures. Examples include dams, levees, berms, seawalls, groins, retaining walls, wind barriers, etc.
- Undertake natural systems protection. Examples include protecting, enhancing, restoring or creating: wetlands, riverbanks, dunes, fisheries, or wildlife or plant habitats.
- Replace trees or other vegetation lost due to weather events, pest infestations or other occurrences that are likely linked to climate change; and/or plant new trees or vegetation to adapt to changes in the climate.
- Additional projects that do not fit into the categories above but serve to adapt your municipality to climate change-related hazards.
- We have not taken any actions or started any projects that actively or passively adapt to climate change-related hazards, nor do we have any plans to do so.  
Note: Marking this box will take you to the end of the survey.

(1/10) Retrofit, Raise or Rebuild Buildings

**\* Has your municipality started, completed or planned for future projects to retrofit, raise or rebuild municipal buildings to adapt to new climate conditions?**

Examples include changes to roofs, windows or building envelopes; flood- or other weather-proofing inside the building or on the grounds; purchase of emergency power generators, etc.

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(1/10) Retrofit, Raise or Rebuild Buildings**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

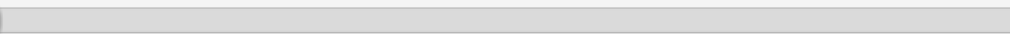
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to retrofitting, raising or rebuilding municipal buildings, including project details, timing, costs and funding.**

(2/10) Relocate or Demolish Buildings

**\* Has your municipality started, completed or planned for future projects to relocate or demolish municipal buildings, critical facilities, emergency facilities or other critical infrastructure?**

Examples include municipal buildings, garages and storage facilities; police and fire stations; correctional facilities; and drinking or wastewater infrastructure such as wells, reservoirs or treatment facilities.

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(2/10) Relocate or Demolish Buildings**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

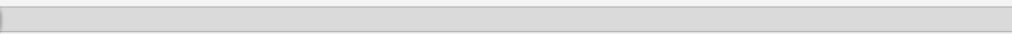
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to relocating or demolishing municipal buildings, critical facilities, emergency facilities or other critical infrastructure. Include project details, timing, costs and funding.**



(3/10) Retrofit Critical Infrastructure (Other Than Buildings)

**\* Has your municipality started, completed or planned for future projects to rebuild or retrofit critical infrastructure (other than buildings)?**

Examples include wastewater, drinking water or other municipal utilities.

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(3/10) Retrofit Critical Infrastructure (Other Than Buildings)**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

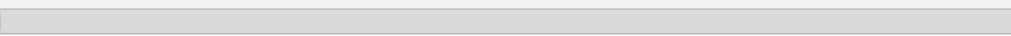
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to rebuilding or retrofitting critical infrastructure (other than buildings). Include project details, timing, costs and funding.**

**\* Has your municipality started, completed or planned for future projects to address increased pavement deterioration on road projects?**

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(4/10) Road Projects**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

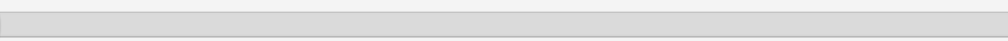
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to road projects. Include project details, timing, costs and funding.**

(5/10) Enlarge, Replace or Create Culverts

**\* Has your municipality started, completed or planned for future projects to enlarge, replace, or create culverts, or make significant changes to culvert maintenance?**

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

- Flooding (not related to sea-level rise)
- Sea-level rise
- Extreme heat
- Extreme weather
- Erosion
- Drought

**(5/10) Enlarge, Replace or Create Culverts**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

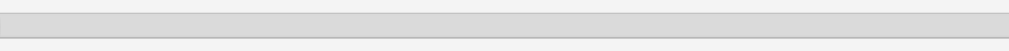
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to culvert projects and maintenance. Include project details, timing, costs and funding.**

(6/10) Replace, Build or Raise Bridges

**\* Has your municipality started, completed or planned for future projects to replace, build, or raise bridges, or make significant changes to bridge maintenance?**

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(6/10) Replace, Build or Raise Bridges**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate  
change was a cost neutral  
benefit of the project(s)

50%

100% - Adapting to climate  
change was the cost driver  
of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to bridges. Include project details, timing, costs and funding.**



(7/10) Build or Improve Other Protective Structures

**\* Has your municipality started, completed or planned for future projects to build or make significant improvements to protective structures?**

Examples include dams, levees, berms, seawalls, groins, retaining walls, wind barriers, etc.

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(7/10) Build or Improve Other Protective Structures**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

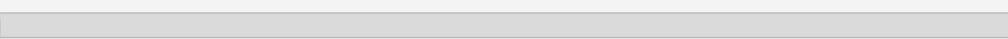
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to other protective structures. Include project details, timing, costs and funding.**

**\* Has your municipality started, completed or planned for future projects to protect natural systems?**

Examples include protecting, enhancing, restoring or creating wetlands, riverbanks, dunes, or fisheries, wildlife and plant habitats.

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(8/10) Protect Natural Systems**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to natural systems protection. Include project details, timing, costs and funding.**

(9/10) Plant or Replace Trees or Other Vegetation

**\* Has your municipality started, completed or planned for future projects to plant new trees or vegetation to adapt to changes in the climate? Has your municipality started, completed or planned for future projects to replace trees or other vegetation lost due to weather events, pest infestations or other occurrences that were likely linked to climate change?**

Include all relevant projects for the ten years between 2017 and 2026.

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(9/10) Plant or Replace Trees or Other Vegetation**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

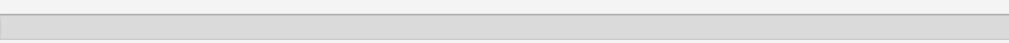
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to replacing or planting trees or other vegetation. Include project details, timing, costs and funding.**

(10/10) Other Hazard-Specific Actions

**\* In addition to the previously listed projects, has your municipality started, completed or planned for future projects which adapt your municipality to climate change-related hazards?**

**Include all relevant projects for the ten years between 2017 and 2026.**

Yes

No

**\* Give the project(s) a short descriptive name. Use the comment box at the bottom of this page to elaborate as necessary.**

**\* If you are aggregating multiple projects related to this topic, specify how many. If not, answer 1.**

**\* What is the primary climate change hazard being addressed?**

**Identify any other climate change hazards specifically being addressed by the project(s).** You can choose to leave this question blank.

Flooding (not related to sea-level rise)

Sea-level rise

Extreme heat

Extreme weather

Erosion

Drought

**(10/10) Other Hazard-Specific Actions**

**\* When did/will the project(s) start and end?**

START CALENDAR YEAR

FINISH CALENDAR YEAR

**\* How much did/will the project(s) cost?**

(Enter rounded whole dollars without dollar signs or commas.)

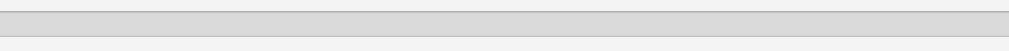
**\* What percentage of the cost of this project would you attribute to climate change?**

For example, you might say that the incremental cost of replacing a culvert with one that has a larger diameter to adapt to climate change-related extreme precipitation events was *approximately X% higher* than the expected cost to maintain, fix or replace the culvert with a similar one.

0% - Adapting to climate change was a cost neutral benefit of the project(s)

50%

100% - Adapting to climate change was the cost driver of the project(s)



**\* Estimate the respective shares of each major funding category (should add to 100%):**

Federal Sources (grants or aid)

State Sources (grants or aid)

Local Sources (property tax, other local funds, loans, etc.)

**Elaborate here on any of your answers related to the other actions you have taken. Include project details, timing, costs and funding.**



\* Are you interested in receiving a copy of your submission via email?

Yes

No

Is there anything else you would like to share with us regarding how your local government is adapting to climate change?



Thank you for taking our survey!

If you need further assistance or have a comment or question, please  
contact

OSC's Local Government and School Accountability Research Unit at  
(866) 321 - 8503 or [localgov@osc.ny.gov](mailto:localgov@osc.ny.gov).