

Grantee: Connecticut - DOH

Grant: B-13-DS-09-0002

April 1, 2021 thru June 30, 2021 Performance Report

Grant Number: B-13-DS-09-0002	Obligation Date:	Award Date:
Grantee Name: Connecticut - DOH	Contract End Date:	Review by HUD: Original - In Progress
Grant Award Amount: \$54,277,359.00	Grant Status: Active	QPR Contact: No QPR Contact Found
LOCCS Authorized Amount: \$54,277,359.00	Estimated PI/RL Funds:	
Total Budget: \$54,277,359.00		

Disasters:

Declaration Number

No Disasters Found

Narratives

Executive Summary:

Connecticut's resilience activities exist at three scales: local demonstration infrastructure projects that will enhance resilience in the low-moderate income City of Bridgeport as a model for the rest of the state, a regional planning process to create a blueprint for resilience across the MID-URN areas of Fairfield and New Haven Counties, and state policy to institutionalize resilience through the SAFR (State Agencies Fostering Resilience) Council.

In Bridgeport, NDR funds will be used to construct three projects and complete two studies. The state will construct a raised University Avenue to provide dry egress for multiple properties that are receiving state support to remediate brownfields and redevelop as mixed-use, a berm that will encircle the eastern area of the South End and significantly reduce flood risk to a large area that includes power generation and substations as well as affordable and historic housing and future transit-oriented development opportunities, and a resilience design center to act as a community hub for resilience activities. The state will study the potential to leverage the regional energy generation and distribution infrastructure located in the South End of Bridgeport for neighborhood benefit and the opportunities for redevelopment in the flood plain in a responsible and resilient manner.

Across Fairfield and New Haven Counties, NDR funds will be used to develop the regional coastal resilience plan, Connecticut Connections. This plan will be based on modeling to be conducted to better understand flood risk and the combination of coastal surge and riverine flooding and provide a blueprint towards resilience for the communities from Greenwich to Madison.

Statewide, NDR funds will support the SAFR Council in their effort to create a resilience roadmap for the state and to institutionalize resilience into state policies.

The activities being carried out under NDR contribute to the State's efforts to affirmatively further fair housing by: 1) enabling the continued safe habitation of existing affordable housing opportunities within walking distance of jobs, public transportation and amenities; 2) mitigating both present and future flood related issues of both publicly and privately owned properties targeted for future multifamily and economic development; and 3) preserving and increasing the potential for affordable homeownership opportunities in this target neighborhood. In addition, the NDR activities will contribute to addressing the regional need to affirmatively further fair housing by encouraging both housing and economic development in low flood risk and transit-oriented neighborhoods across Fairfield and New Haven counties. Many of these NDR activities address specific action steps found in the State of Connecticut Analysis of Impediments to Fair Housing Choice, which is compliant with and supports the federal obligation to affirmatively further fair housing. These action steps include: 1) encourage the creation and rehabilitation of affordable housing in a variety of locations; 2) collaborate with other state agencies to the creation and rehabilitation of affordable housing; and 3) ensure state and local planning documents affirmatively further fair housing.

MID-URN Areas:

The State of Connecticut activities focus on the MID-URN geographies of Fairfield and New Haven Counties with the NDR-funded infrastructure activities limited to the Low-Mod income city of Bridgeport.

Key Agencies, Partners, Positions, Personnel:

Staff at the Department of Housing will oversee all activities funded through the NDR grant. In addition to a Director of the program, the state will be competitively procuring program management support for grant management, compliance, finance, and other functions.

The bulk of the work will be conducted by consultants and the state is just completing its first public procurement for alternatives assessment, environmental review, and preliminary engineering. Additional consultants will be procured as needed as the projects progress.

The CT Institute for Resilience and Climate Adaptation (CIRCA) at the University of Connecticut will act a sub-recipient, leading the CT Coastal Connections Regional Plan process.



Other state agencies through the SAFR Council including the Office of Policy and Management, Department of Transportation, Department of Energy and Environmental Protection and others will support the Department of Housing on timely permitting, review, and other support measures to ensure that the outcomes and timelines of the projects are met.

Overall	This Report Period	To Date
Total Projected Budget from All Sources	\$0.00	\$65,693,082.00
Total Budget	\$0.00	\$54,277,359.00
Total Obligated	\$1,585,977.89	\$12,114,523.51
Total Funds Drawdown	\$1,585,977.89	\$12,074,678.71
Program Funds Drawdown	\$1,585,977.89	\$12,074,678.71
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$1,585,977.89	\$12,074,678.71
HUD Identified Most Impacted and Distressed	\$849,748.63	\$5,629,974.32
Other Funds	\$ 0.00	\$ 11,415,723.00
Match Funds	\$ 0.00	\$ 11,415,723.00
Non-Match Funds	\$ 0.00	\$ 0.00

Funds Expended

Overall	This Period	To Date
STATE OF CONNECTICUT	\$ 1,585,977.89	\$ 12,074,678.71
State of Connecticut	\$ 0.00	\$ 0.00

Progress Toward Required Numeric Targets

Requirement	Target	Projected	Actual
Overall Benefit Percentage	50.00%	100.00%	100.00%
Overall Benefit Amount	\$20,947,018.00	\$42,574,036.00	\$6,543,453.66
Limit on Public Services	\$8,141,603.85	\$0.00	\$0.00
Minimum Supporting Leverage	\$146,820,899.00	\$925,846,000.00	\$0.00
Limit on Admin/Planning	\$12,380,665.59	\$12,383,323.00	\$5,531,225.05
Limit on Admin	\$0.00	\$2,713,868.00	\$1,362,405.57
Most Impacted and Distressed	\$54,277,359.00	\$0.00	\$5,629,974.32

Overall Progress Narrative:

The second quarter of 2021 was highlighted by completion and submission of the 60% milestone. Additionally, CTDOH along with the project team initiated a regimented schedule of coordination meetings with CTDEEP and other state agencies, City of Bridgeport departments, stakeholders, and the community.

For Administration, the project management consultant team continues to support all aspects of administration including procurement, finance, audit, monitoring, document storage, environmental review, and construction.

Into Q3 2021, the key work will involve review of the 60% design submission, value engineering and sourcing of additional funding. Additionally, the team will continue the project outreach to stakeholders and state and federal agencies as well as at the Technical Advisory Committee (TAC), Community Advisory Committee (CAC) and to the public in general. Q3 will also include the advancement of the design documents towards the 90% milestone (scheduled to be delivered in Q3 2021) and continued coordination with the Bassick High School project adjacent to the Flood Risk Reduction Project (FRRP) and stakeholder outreach.

Project Summary

Project #, Project Title	This Report	To Date	
	Program Funds Drawdown	Project Funds Budgeted	Program Funds Drawdown



9999, Restricted Balance	\$0.00	\$0.00	\$0.00
LTC, Long Term Commitment	\$0.00	\$0.00	\$0.00
NDR-ADMIN-26336, Administration	\$170,415.39	\$2,713,868.00	\$1,362,405.57
NDR-BPT-, Bridgeport South End	\$849,748.63	\$42,574,036.00	\$6,727,418.66
NDR-CCRP-, Connecticut Connections Coastal Resilience	\$565,813.87	\$8,989,455.00	\$3,984,854.48
NDR-SAFR-, SAFR Administration	\$0.00	\$0.00	\$0.00
OV, Outcome Values	\$0.00	\$0.00	\$0.00
SL, Supporting Leverage	\$0.00	\$0.00	\$0.00

Activities

Project # / NDR-ADMIN-26336 / Administration



Grantee Activity Number: NDR-ADMIN**Activity Title: Administration****Activity Type:**

Administration

Activity Status:

Under Way

Project Number:

NDR-ADMIN-26336

Project Title:

Administration

Projected Start Date:

02/08/2017

Projected End Date:

09/30/2022

Benefit Type:

N/A

Completed Activity Actual End Date:**National Objective:**

NA

Responsible Organization:

STATE OF CONNECTICUT

Overall**Total Projected Budget from All Sources****Apr 1 thru Jun 30, 2021****To Date**

\$0.00

\$2,713,868.00

Total Budget

\$0.00

\$2,713,868.00

Total Obligated

\$170,415.39

\$1,362,405.57

Total Funds Drawdown

\$170,415.39

\$1,362,405.57

Program Funds Drawdown

\$170,415.39

\$1,362,405.57

Program Income Drawdown

\$0.00

\$0.00

Program Income Received

\$0.00

\$0.00

Total Funds Expended

\$170,415.39

\$1,362,405.57

STATE OF CONNECTICUT

\$170,415.39

\$1,362,405.57

Most Impacted and Distressed Expended

\$0.00

\$0.00

Other Funds

\$ 0.00

\$ 0.00

Match Funds

\$ 0.00

\$ 0.00

Non-Match Funds

\$ 0.00

\$ 0.00

Other Funds:**Overall****This Period****To Date**

Match Funds

\$ 0.00

\$ 0.00

Department of Energy and Environmental Protection

\$ 0.00

\$ 0.00

Department of Transportation

\$ 0.00

\$ 0.00

Office of Policy and Management

\$ 0.00

\$ 0.00

University of Connecticut, CT Institute for Resilience and

\$ 0.00

\$ 0.00

Activity Description:

Grant Administration activities to ensure that the program deadlines are met and all HUD regulations are followed in achieving the desired outcomes of the other projects.

Location Description:

Statewide

Activity Progress Narrative:

The program management (PM) consultant continues to provide support for all aspects of the program

grant. As the liaison between the project consultants and CTDOH they have established a document management system that will house all aspects of the program including contracts, submittals, reports and registers and financials. The PM has established and continues to maintain efficient workflows that will allow for full tracking of all program components. After the submission of the 60% design for FRRP in Q2, a risk assessment was completed, and an updated risk register and memo were developed and submitted to CTDOH for review. A copy also resides in the document management system. The PM continues to review and process consultant invoices and submitting them to CTDOH for final review and approval. As the grantee, CTDOH has full and final oversight of all aspects of the program and the PM team reports directly to CTDOH.

Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures

No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources

No Other Funding Sources Found

Total Other Funding Sources

Amount

\$27,550,000.00

Other Funding Sources Budgeted - Detail

Match Sources

Department of Energy and Environmental Protection

Department of Transportation

Office of Policy and Management

University of Connecticut, CT Institute for Resilience and Climate Adaptation

Subtotal Match Sources

Amount

\$25,000,000.00

\$1,000,000.00

\$350,000.00

\$1,200,000.00

\$27,550,000.00

Activity Supporting Documents:

None

Project # / NDR-BPT- / Bridgeport South End



Grantee Activity Number: NDR-BPT-Berm - 2066128

Activity Title: Earthen Berm

Activity Type:

Dike/dam/stream-river bank repairs

Project Number:

NDR-BPT-

Projected Start Date:

02/08/2017

Benefit Type:

Area Benefit (Census)

National Objective:

Low/Mod

Activity Status:

Under Way

Project Title:

Bridgeport South End

Projected End Date:

09/30/2022

Completed Activity Actual End Date:

Responsible Organization:

STATE OF CONNECTICUT

Overall	Apr 1 thru Jun 30, 2021	To Date
Total Projected Budget from All Sources	\$0.00	\$35,630,036.00
Total Budget	\$0.00	\$35,630,036.00
Total Obligated	\$723,654.47	\$5,564,788.77
Total Funds Drawdown	\$723,654.47	\$5,564,788.77
Program Funds Drawdown	\$723,654.47	\$5,564,788.77
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$723,654.47	\$5,564,788.77
STATE OF CONNECTICUT	\$723,654.47	\$5,564,788.77
Most Impacted and Distressed Expended	\$723,654.47	\$4,685,585.55
Other Funds	\$ 0.00	\$ 0.00
Match Funds	\$ 0.00	\$ 0.00
Non-Match Funds	\$ 0.00	\$ 0.00

Other Funds:

Overall	This Period	To Date
Match Funds	\$ 0.00	\$ 0.00

Activity Description:

Construct an accredited flood protection line linking the redevelopment of 60 Main Street, the new elevated natural gas-fired power plant, and downtown, removing the eastern South End’s critical infrastructure and low-moderate income housing and historic districts from the 100-year flood plain and reinforcing the connection between the Downtown and South End neighborhoods.

Location Description:

City of Bridgeport’s South End

Activity Progress Narrative:

Bi-weekly conference calls were conducted with CT DOH, CT DOT and the Design Team to coordinate issues and review design status. Coordination meetings were conducted with adjacent property owners including the owner of 60 Main Street. Processing of amendment documentation associated with additional public meetings and a Tree Inventory for Seaside Park (requirement of the Programmatic Agreement) was ongoing. 60% Final Design documents were submitted to CT DOH on 4/19/21 and reviews were initiated by CT DOT, CT DEEP, and



other stakeholders/partners. Comments received to date have been forwarded to the design team for their evaluation/assessment, and response/incorporation. Technical Advisory Committee Meeting and Community Advisory Committee meetings were conducted on 4/27/21. Public information Meeting was conducted on 4/28/21. All three meetings were conducted virtually and were reasonably well attended. Right-of-way acquisition mapping was initiated based on the layout/impacts depicted in the 60% design submission

Accomplishments Performance Measures

	This Report Period	Cumulative Actual Total / Expected
	Total	Total
# of public facilities	0	0/1
# of Linear feet of Public	0	0/3500
# of Linear miles of Public	0	0/1

Beneficiaries Performance Measures

	Beneficiaries - Area Benefit Census			
	Low	Mod	Total	Low/Mod
# of Persons	3246	645	4440	87.64

LMI%:	77.08
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Activity Locations

No Activity Locations found.

Other Funding Sources

No Other Funding Sources Found
 Total Other Funding Sources

Amount

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found

Activity Supporting Documents: None



Grantee Activity Number: NDR-BPT-ResCtr - 2066127**Activity Title: Resilience Center****Activity Type:**

Rehabilitation/reconstruction of public facilities

Project Number:

NDR-BPT-

Projected Start Date:

02/02/2017

Benefit Type:

Area Benefit (Census)

National Objective:

Low/Mod

Activity Status:

Under Way

Project Title:

Bridgeport South End

Projected End Date:

09/30/2022

Completed Activity Actual End Date:**Responsible Organization:**

STATE OF CONNECTICUT

Overall**Total Projected Budget from All Sources****Apr 1 thru Jun 30, 2021****To Date**

\$0.00

\$1,000,000.00

Total Budget

\$0.00

\$1,000,000.00

Total Obligated

\$20,175.08

\$155,326.94

Total Funds Drawdown

\$20,175.08

\$155,326.94

Program Funds Drawdown

\$20,175.08

\$155,326.94

Program Income Drawdown

\$0.00

\$0.00

Program Income Received

\$0.00

\$0.00

Total Funds Expended

\$20,175.08

\$155,326.94

STATE OF CONNECTICUT

\$20,175.08

\$155,326.94

Most Impacted and Distressed Expended

\$20,175.08

\$130,502.37

Other Funds

\$ 0.00

\$ 0.00

Match Funds

\$ 0.00

\$ 0.00

Non-Match Funds

\$ 0.00

\$ 0.00

Other Funds:**Overall****This Period****To Date**

Match Funds

\$ 0.00

\$ 0.00

Activity Description:

Construct a design center in the South End to operate as a community center and provide a central location for providing information to the community and assist the community in future recovery efforts.

Location Description:

City of Bridgeport's South End

Activity Progress Narrative:

During Final Design, the team will contribute to the collaborative understanding of how NDR funding to the Freeman Houses will be used to create space and programming reflective of the proposed resilience center status of Freeman Houses. No Design Team activity this quarter.

Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures

Beneficiaries - Area Benefit Census

# of Persons	Low	Mod	Total	Low/Mod
	3240	645	4440	87.50

LMI%:

Activity Locations

No Activity Locations found.

Other Funding Sources

Amount

No Other Funding Sources Found

Total Other Funding Sources

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found

Activity Supporting Documents:

None

Grantee Activity Number: NDR-BPT-Univ-2066126**Activity Title: University Ave****Activity Type:**

Construction/reconstruction of streets

Project Number:

NDR-BPT-

Projected Start Date:

02/08/2017

Benefit Type:

Area Benefit (Census)

National Objective:

Low/Mod

Activity Status:

Under Way

Project Title:

Bridgeport South End

Projected End Date:

09/30/2022

Completed Activity Actual End Date:**Responsible Organization:**

STATE OF CONNECTICUT

Overall**Total Projected Budget from All Sources****Apr 1 thru Jun 30, 2021**

\$0.00

To Date

\$7,404,000.00

Total Budget

\$0.00

\$5,264,000.00

Total Obligated

\$105,919.08

\$823,337.95

Total Funds Drawdown

\$105,919.08

\$823,337.95

Program Funds Drawdown

\$105,919.08

\$823,337.95

Program Income Drawdown

\$0.00

\$0.00

Program Income Received

\$0.00

\$0.00

Total Funds Expended

\$105,919.08

\$823,337.95

STATE OF CONNECTICUT

\$105,919.08

\$823,337.95

Most Impacted and Distressed Expended

\$105,919.08

\$693,009.00

Other Funds

\$ 0.00

\$ 2,140,000.00

Match Funds

\$ 0.00

\$ 2,140,000.00

Non-Match Funds

\$ 0.00

\$ 0.00

Other Funds:**Overall**

Match Funds

This Period

\$ 0.00

To Date

\$ 0.00

Department of Economic and Community Development

\$ 0.00

\$ 0.00

Activity Description:

Raise University Avenue from Myrtle Avenue to 60 Main Street to serve as a dry egress corridor for the redevelopment of 60 Main Street and other properties.

Location Description:

City of Bridgeport's South End

Activity Progress Narrative:

Bi-weekly conference call were conducted with CT DOH, CT DOT and the Design Team to coordinate issues and review design status. Preparation of subsurface investigation bid documents continued. 60% Final Design documents were submitted to CT DOH on 4/19/21.

Utility coordination was initiated. Coordination meetings were conducted with the Bassick High School design team affected property owners, and CT DEEP.

Accomplishments Performance Measures

	This Report Period	Cumulative Actual Total / Expected
	Total	Total
# of Linear feet of Public	0	0/1310
# of Linear miles of Public	0	0/1

Beneficiaries Performance Measures

	Beneficiaries - Area Benefit Census			
	Low	Mod	Total	Low/Mod
# of Persons	3240	645	4440	87.50

LMI%:

Activity Locations

No Activity Locations found.

Other Funding Sources

	Amount
No Other Funding Sources Found	
Total Other Funding Sources	\$2,365,000.00

Other Funding Sources Budgeted - Detail

Match Sources	Amount
Department of Economic and Community Development	\$2,365,000.00
Subtotal Match Sources	\$2,365,000.00

Activity Supporting Documents: None

Project # / NDR-CCRP- / Connecticut Connections Coastal Resilience



Grantee Activity Number: NDR-CCCRP-Coastal - 2066131**Activity Title: Connecticut Connections Coastal Resilience Plan****Activity Type:**

Planning

Activity Status:

Under Way

Project Number:

NDR-CCRP-

Project Title:

Connecticut Connections Coastal Resilience Plan

Projected Start Date:

02/08/2017

Projected End Date:

09/30/2022

Benefit Type:

Area Benefit (Census)

Completed Activity Actual End Date:**National Objective:**

NA

Responsible Organization:

STATE OF CONNECTICUT

Overall

	Apr 1 thru Jun 30, 2021	To Date
Total Projected Budget from All Sources	\$0.00	\$18,263,026.00
Total Budget	\$0.00	\$8,989,455.00
Total Obligated	\$565,813.87	\$3,984,854.48
Total Funds Drawdown	\$565,813.87	\$3,984,854.48
Program Funds Drawdown	\$565,813.87	\$3,984,854.48
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$565,813.87	\$3,984,854.48
STATE OF CONNECTICUT	\$565,813.87	\$3,984,854.48
Most Impacted and Distressed Expended	\$0.00	\$0.00
Other Funds	\$ 0.00	\$ 9,273,571.00
Match Funds	\$ 0.00	\$ 9,273,571.00
Non-Match Funds	\$ 0.00	\$ 0.00

Other Funds:

Overall	This Period	To Date
Match Funds	\$ 0.00	\$ 0.00
Department of Economic and Community Development	\$ 0.00	\$ 0.00
Department of Transportation	\$ 0.00	\$ 0.00

Activity Description:

Develop a regional coastal resilience plan covering the MID-URN geography of Fairfield and New Haven Counties including modeling of the future impacts of flooding to critical facilities.

Location Description:

All of Fairfield and New Haven Counties

Activity Progress Narrative:

In this Quarter, Resilient Connecticut continued to progress as the suite of technical tools and capacity that's been developed thus far, was utilized for analysis, engagement across multiple scales of planning, and to establish priority resilience challenges and opportunities for additional site planning in Phase III. 4 additional

regional stakeholder workshops were held in May 2021 in each of the Regional Councils of Governments (COGs) in Fairfield and New Haven Counties. These workshops were focused on presenting specific locations that have been identified in the regional vulnerability assessment in Phase II. Follow-up engagement with individual municipalities is ongoing to assess the overlap between these locations, local priorities, and support for continued site planning and conceptual design in Phase III. The CIRCA research team also continued to develop high resolution nearshore modeling capacity that will be used to provide detailed information on current and future flood projections for site planning and project design. A number of different faculty research projects in the areas of hydrology, heat, transit oriented development, and climate policy continued to progress and were presented during a research webinar series in June 2021.

Planning Activities

The Phase II planning process was advanced in this quarter through a number of important milestones and activities. Following the first set of regional stakeholder workshops in January 2021, the Planning Team focused on analysis and vulnerability index mapping using the tools developed in Winter 2021. A 2nd round of regional workshops was held on May 24th, 25th, 26th, and 27th in each Council of Governments (COG) region in Fairfield and New Haven Counties. The purpose of this 2nd round of workshops was to present initial draft maps of "regional resilience opportunity areas". These opportunity areas, which will be used to define locations for site planning and projects in Phase III, were identified through analysis using the Climate Change Vulnerability Index (CCVI) tool, zones of shared risk mapping, social vulnerability mapping, areas of planned development and transit oriented development (TOD) potential, as well as, delineation of areas with significant regional infrastructure and assets. The initial opportunity area maps were presented and refined through breakout discussions and feedback in each workshop. Links to workshop recordings and information packets, including maps can be found on the workshop website at: <https://resilientconnecticut.uconn.edu/may-2021-workshops/>. See Appendix A for a workshop summary report and supporting documentation.

A "Vulnerability Assessment and Regional Opportunities for Resilience Report" is being developed for public review and comment in Quarter 3 of 2021. Following on these regionally focused workshops, the Team is also engaging individual municipalities to assess local resilience and TOD priorities, find overlap with the regional resilience opportunities, and gauge local support for additional planning and project work in Phase III. Municipal meetings were held on May 13th (New Haven), June 16th (Norwalk), June 21st (Naugatuck), June 22nd (Stratford), and June 28th (Ansonia). These municipal planning meetings will continue in the first ½ of Quarter 3 2021 with additional towns in the region. A quarterly meeting of the SAFR Council was held on June 25th to provide updates on the results of the workshops and discuss the transition to Phase III in Fall 2021.

Engagement

Ongoing engagement with stakeholders across the 4 COG regions in Fairfield and New Haven Counties continued in this quarter, with the assistance of COG staff and the Consultant Team. Regular updates continued to be provided at COG board meetings, as well as various Transportation, Regional Planning, and Technical Advisory Committee meetings that represent and include membership of communities across the two counties.

In this last quarter, CIRCA started a new information series designed to package fact sheets, case studies, and white papers over the next two years. To launch this effort, we released a new fact sheet describing our Institute and the Resilient Connecticut project in both English and Spanish. Complementing this general fact sheet is a case study on Branford's Coastal Resiliency Reserve Fund to help communities plan for their local share of resilience costs. Over this summer, we expect to have a new fact sheet released to help communities consider "10 steps for municipal resilience".

<https://resilientconnecticut.uconn.edu/fact-sheets/>

CIRCA also hosted a nine-part Resilient Connecticut research webinar series in June. Focused on specific topics and condensed on time, each event included presentation and Q&A moderated by CIRCA's Assistant Director of Research. More information about each presentation can be found in the "Program Details" on the Research Webinar Website (<https://resilientconnecticut.uconn.edu/june-21-research-webinar-series/>) including an abstract, fact sheet, and slides. Presentations were also posted on CIRCA's YouTube Channel and UConn Today covered many of the webinars with news coverage – titles linked below have more information about the topics presented:

- Should We Stay or Should We Go? Shoreline Homes and Rising Sea Levels
- A Simple Simulation to Help Coastal Towns Plan for Rising Sea Levels
- Land Surface Temperature and Land Use in New Haven & Fairfield Counties
- Don't Get Soaked: Flood Damage Could Lessen if Cities Build Smarter
- Expanding Climate Resilience with Forward-Thinking Policy Initiatives
- For Future Flood Control, Cities Need a Strategy

Technical Supporting Activities

The CIRCA research team has published an open access journal article on Coastal Engineering for the nearshore modeling efforts in Branford, Norwalk, and New Haven. The article can be reached from here <https://www.sciencedirect.com/science/article/pii/S037838392100106X>

The team also finished nearshore modeling work for Fairfield and New Haven-East Shore Morris Cove and the Tweed Airport area. For the airport area, we examined i) different flood restriction scenario design to understand the dynamics of flood flow and ii) compared 10 year, 10 year + 20 inches of sea-level rise, 100 year and 100 year + 20 inches of sea level rise flooding scenarios to demonstrate how much of the airport area, streets, buildings and community lifelines may be flooded under these different scenarios. The results were presented in the research webinar series mentioned above. We are working on providing similar flood scenario analysis in a report format for towns to use in planning going forward.

Modeling work was also completed in the Guilford inlet area. The effect of inlet width on the tidal exchange between two idealized basins was studied numerically by using four hydrodynamic models (ROMS, FVCOM, ADCIRC, and SCHISM). The along-inlet water level drop is primarily caused by horizontal eddy viscosity, which is related to the turbulent transfer of the energy. For the no-slip scenario, where the speed of the water layer is identical to the speed of the boundary, the across-inlet flow shear is augmented along the inlet banks and leads to a large along-inlet water level drop. For the slip scenario, where there is relative movement between the water and the boundary, water levels drop downstream at both inlet mouths, where the changing of flow divergence enhances the horizontal eddy viscosity. All the no-slip model results are more consistent with the Guilford observation: ROMS, FVCOM, and SCHISM give comparable constraints, while ADCIRC is much less. The results can direct model selection and grid design in coastal modeling. In addition, two simple predicting models were built based on the above two scenarios, which provide quick and useful guidance on exchange rates between basins for ecologists and engineers. The results were also presented in the research webinar series. The team is working on preparing a journal article to publish this work.

18 heat sensors were redeployed on May 20th for recording relative humidity and temperature in the city of New Haven. The sensors will be kept until October 2021.

Capacity Building Activities

Additional faculty sponsored, capacity-building research activities were advanced in the subject areas of hydrology, heat, transit-oriented development, and climate policy. The hydrology team focused on extreme and annual maximum riverine flooding in different impervious areas and prepared inundation maps. The team completed their project and submitted their final report for revisions. The heat team has completed their 20-year heat island analysis and worked on deriving the relationship between heat islands and the different landscape typologies in the two counties. They submitted their final report for review. The transit-oriented development team analyzed the potential effects of sea-level rise on TOD efforts along the Metro-North New Haven mainline. They completed their recommendation section and final report for review. The legal team completed a review of neighboring state climate policy for comparison with Connecticut’s current policy landscape. All the capacity building teams participated in the research webinar series in June to present their work.

Appendix A – Phase II Regional Workshop Series 2 – Summary Report

Regarding stakeholder evaluation, the survey and interview instruments have been developed and are currently undergoing review and revisions with the Institutional Review Board (IRB), which reviews research processes to protect participants. In addition to internal project research, CIRCA has co-developed a survey with the Department of Public Health on emergency sheltering and cooling station practices that will inform both the vulnerability assessment and resilience plans for the project area. The intended respondents will include chief elected officials, health districts/departments, and emergency management directors. The survey will be issued in the beginning of the third quarter. Other engagement activities included social media, e-newsletter releases, further coordination with the GC3, presentations at municipal boards within the project region, and outreach to various nonprofit organizations.

Accomplishments Performance Measures

	This Report Period	Cumulative Actual Total / Expected
	Total	Total
# of Plans or Planning Products	0	0/1
# of community engagement	0	6/15

Beneficiaries Performance Measures

	Beneficiaries - Area Benefit Census			
	Low	Mod	Total	Low/Mod
# of Persons	460395	280398	1802207	41.10

LMI%:	
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Activity Locations

No Activity Locations found.

Other Funding Sources

	Amount
No Other Funding Sources Found	
Total Other Funding Sources	\$111,750,000.00

Other Funding Sources Budgeted - Detail

Match Sources	Amount
Department of Economic and Community Development	\$30,350,000.00
Department of Transportation	\$81,400,000.00
Subtotal Match Sources	\$111,750,000.00

Activity Supporting Documents: None

