

TOWN COUNCIL
Town of Trumbull
CONNECTICUT
www.trumbull-ct.gov

TOWN HALL
Trumbull

TELEPHONE
(203) 452-5005



AGENDA No .736

- I CALL TO ORDER
- II MOMENT OF SILENCE
- III PLEDGE OF ALLEGIANCE
- IV ROLL CALL
- V APPROVAL OF MINUTES
- VI PUBLIC COMMENT
- VII NEW BUSINESS

DATE: March 16, 2015
TIME: 8:00 p.m.
PLACE: Town Hall

NOTICE is hereby given that the Town Council of the Town of Trumbull, Connecticut will hold a SPECIAL meeting on Monday, March 16, 2015 at 8:00 p.m. at the Trumbull Town Hall, for the following purpose:

DISCUSSION ITEM: The Trumbull Library System – 2015 One Book-One Town Program

1. RESOLUTION TC25-163: To consider and act upon a resolution which would approve and endorse the Capitol Regional Council of Governments Statewide Aerial Flight Regional Performance Incentive Program Grant Application by the Greater Bridgeport Regional Council and authorizes the First Selectman to sign all necessary agreements and take all necessary actions to allow for the Town's participation in the program.
2. RESOLUTION TC25-164: To consider and act upon a resolution which would approve and endorse the Automated Public Works Regional Performance Incentive Program Grant Application by the Greater Bridgeport Regional Council and authorizes the First Selectman to sign all necessary agreements and take all necessary actions to allow for the Town's participation in the program.

VIII ADJOURNMENT
COPY OF THE RESOLUTION ATTACHED HERETO
Carl A. Massaro, Jr., Chairman Trumbull Town Council

RESOLUTIONS

1. RESOLUTION TC25-163: BE IT RESOLVED, That the Capitol Regional Council of Governments Statewide Aerial Flight Regional Performance Incentive Program Grant Application by the Greater Bridgeport Regional Council is hereby endorsed and approved and;
BE IT FURTHER RESOLVED that the First Selectman is hereby authorized to sign all necessary agreements and take all necessary actions to allow for the Town's participation in the program. (Full Resolution Attached)

2. RESOLUTION TC25-164: BE IT RESOLVED, That the Automated Public Works Regional Performance Incentive Program Grant Application by the Greater Bridgeport Regional Council is hereby endorsed and approved and;
BE IT FURTHER RESOLVED, That the First Selectman is hereby authorized to sign all necessary agreements and take all necessary actions to allow for the Town's participation in the program. (Full Resolution Attached)

ATTACHMENT #1

FULL RESOLUTION

RESOLUTION TC25-163: **WHEREAS**, Section 4-124s as amended by Section 251 and 253 of Public Act 13-247 passed by the Connecticut General Assembly provides statewide incentive grants to Regional Planning Organizations for projects that involve shared services; and

WHEREAS, on December 16, 2014 the Greater Bridgeport Regional Council passed a resolution authorizing the Capitol Region Council of Governments (CRCOG) to develop and submit an application package to the State Office of Policy and Management for funding under the Regional Performance Incentive Grant Program for a Statewide Flight to Acquire Orthophotography and LIDAR; and

WHEREAS, CRCOG will act as a convener and facilitator of a single, statewide flight to acquire orthophotography (aerial imagery) and LIDAR as a means to achieve cost savings for municipalities of the State of Connecticut; and

WHEREAS, the Chief Elected Officials and municipal staff of the Greater Bridgeport Region have expressed an interest in taking part in the project proposal entitled:

1. Statewide Flight to Acquire Orthophotography and LIDAR

NOW THEREFORE BE IT RESOLVED, that the *Trumbull City Council* approves and endorses the above referenced **Regional Performance Incentive Program** Grant Application by the Greater Bridgeport Regional Council and authorized the First Selectman to sign all necessary agreements and take all necessary actions to allow for the Town's participation in the program.

ATTACHMENT #2

FULL RESOLUTION

RESOLUTION TC25-164: **WHEREAS**, Section 4-124s as amended by Section 251 and 253 of Public Act 13-247 passed by the Connecticut General Assembly provides statewide incentive grants to Regional Planning Organizations for projects that involve shared services; and

WHEREAS, the Greater Bridgeport Regional Council is acting as a convener and facilitator of service sharing projects in the Greater Bridgeport Region; and

WHEREAS, on December 16, 2014 the Greater Bridgeport Regional Council passed a Resolution authorizing the development and submittal of a grant application to the State of Connecticut Office of Policy and Management's Regional Performance Incentive Program for an Automated Public Works Operations Platform; and

WHEREAS, the Automated Public Works Platform is the backend infrastructure platform of an Automated Vehicle Locator (AVL) service that will automate internal work flows by tracking vehicles on a real time basis to capture vehicle data which will provide reduced costs and expanded functionality to municipalities. The project will help the Public Works Departments of the GBRC's member municipalities to efficiently manage vehicles, equipment, resources and man hours; and

WHEREAS, the Chief Elected Officials of the Greater Bridgeport Region have supported the Automated Public Works Platform included in the application package, as it will benefit each municipality and the Region as a whole; and

WHEREAS, the Town of Trumbull has expressed an interest in taking part in the project proposal entitled:

1. Automated Public Works Platform

NOW THEREFORE BE IT RESOLVED, that the *Trumbull Town Council* approves and endorses the above referenced ***Regional Performance Incentive Program*** Grant Application by the Greater Bridgeport Regional Council and authorized the First Selectman to sign all necessary agreements and take all necessary actions to allow for the Town's participation in the program.

REGIONAL PERFORMANCE INCENTIVE PROGRAM STATEWIDE AERIAL FLIGHT

SUMMARY OF RESOLUTION & BACKGROUND:

This resolution will support a proposal to the Regional Performance Incentive Program (RPIP) by the Capitol Region Council of Governments' (CRCOG) to fund a *statewide flight to collect aerial imagery*. Currently, each municipality or region in the State of Connecticut must secure funding for flights such as these.

RPIP is a grant program through the State of Connecticut's Office of Policy and Management, with the goal of producing "economies of scale" beneficial to municipalities. The program provides funds to Councils of Governments for the following types of projects: joint provision of a service or services currently provided by individual municipalities but not presently provided on a regional basis, a planning study regarding the joint provision of any service on a regional basis or shared information technology services.

KEY CONSIDERATIONS:

- Will follow a set standard to insure collection of high quality data.
 - Methods and quality will be consistent with the GBRC's 2013 flight.
-

COST & FUNDING DETAILS:

- No local or regional match is required.
 - The RPIP proposal is for \$2 million.
-

OTHER REQUIREMENTS:

- Each participating municipality's legislative body must approve a resolution in support of the proposal by March 31, 2015.



Regional Performance Incentive Program

Pursuant to CGS Section 4-124s

As amended by PA-13-247

Form RPI-2

Rev.09/2014

Proposal for Joint Provision of Service(s) or Study to be filed with the Secretary of the Office of Policy and Management

Submit to: Office of Policy and Management,
450 Capitol Ave. MS #54 SLP
Hartford, CT 06106-1379,
Att: RPI Program

Attach additional pages if necessary; identify project and related proposal element at the top of page.

Applicant Entity (RPOs; Two or more Municipalities acting through an RPO; and/or Economic Development Districts):	
Name	Capitol Region Council of Governments
Address	241 Main Street, 4 th Floor
City/State/Zip	Hartford, CT 06106-5310
Contact Person(s):	
Name	Erik Snowden
Title	IT/GIS Coordinator
Telephone	(860) 522-2217 x217
Fax	(860) 724-1274
E-mail	esnowden@crcog.org
Amount of Regional Performance Incentive Funding Requested: \$2,175,125	
Short Descriptive Title of Project:	
Statewide Flight to Acquire Orthophotography and LIDAR	
REQUIRED PROPOSAL ELEMENTS Items (1) through (15):	
(1.) Proposed Shared Service(s) or related Study: Describe at least one service currently provided by a participating municipality or municipalities or study of the provision of such service, which is not currently provided on a regional basis, for which this proposal is being submitted (attach additional pages as necessary):	
<p>The goal of this proposal is to obtain funding for the following geographic data products and services covering the State of Connecticut including a ¼ mile buffer:</p> <ul style="list-style-type: none"> • Aerial Orthoimagery – 3 inch pixel resolution, 4 band (Red, Green, Blue and Near Infrared) • Elevation Data – LIDAR, Contours and related products • 3rd Party Quality Control and Quality Assurance • Hosting and Storage – Download and online map service 	

(2.) Describe the need for such service (attach additional pages as necessary):

Orthoimagery and elevation data serve as base datasets that support environmental, transportation and community planning, asset management, as well as public safety and emergency management. They also serve as the foundation for derivative data products such as planimetric data (building footprints, edge of pavement, trees, etc.). Below are some examples of the use of orthoimagery and elevation data:

- Engineering base mapping for preliminary design and site inspection
- Utilities construction planning and preliminary design
- Pavement and sidewalk replacement programs
- Economic Development
- Wetlands enforcement
- FEMA mapping review, LOMA and LOMR applications
- Engineering base mapping for preliminary designs
- Sidewalk and pavement reconstruction/replacement programs
- Emergency dispatch operations
- Police, Fire, and EMS mobile and web applications
- Sanitary and sewer drainage mapping
- Address point mapping
- Building permit processing
- Zoning enforcement, planning, and economic development projects
- BOE school redistricting
- School bus route and stop mapping
- Property assessment and tax mapping

Currently there are no statewide orthoimagery or elevation datasets that cover state of Connecticut at the level of detail required by individual municipalities. This project will provide uniformity both in date of capture and level of precision across the entire state.

Imagery and planimetric data from a single time period for the entire state improves the efficiency and accuracy of regional, transportation, and environmental planning projects that is unavailable when data is acquired piece meal and this type of comprehensive data set facilitates cooperation between different levels of government.

(3.) Describe the method of delivering such service on a regional basis and the organization responsible for delivering such regional service or study:

The data products are to be delivered to each Regional Planning Organization as well as CT DOT, DESPP, and UConn on portable hard disk drives.

Additionally we propose that the University of Connecticut host download and Web Mapping Services (WMS) for use in Geographic information System (GIS) software over the internet.

(4.) Describe the population that will be served (we are not looking for population numbers, but rather whether a project serves an entire region(s), applicant towns, or any particular segment of the population such as “disabled residents dependent upon public transportation” or “residents in need of ‘affordable housing’”, etc.):

This data would serve all CT municipalities, Regional Planning Organizations and state agencies. Deliverables from this project will be in the public domain. Connecticut citizens, students and businesses will benefit from the availability of high resolution data about their own neighborhoods and communities.

(5) Describe the manner in which regional service delivery will achieve economies of scale:

The estimated savings realized would be over 80% with a total cost of the project done individually of \$10.55 million (estimated) vs. \$1.85 million (estimated) if done as one project. One set of ground control, flight planning and coordination would be required as opposed to 169 separate sets of ground control, flight planning and coordination. Additional economies of scale are realized by batch processing of the data for the entire region instead of 169 individual municipalities as well as increased administration and contracting efficiency.

The increase in bargaining leverage of a very large aerial project vs. a single town is also substantial.

(6.) Provide the amount by which participating municipalities will reduce their mill rate as a result of the savings realized (*Exclude grant funds from calculations.*):

Please see Attachment A

(7.) Provide a cost benefit analysis for the provision of the service by each participating municipality and by the entity submitting the proposal:

Please see Attachment B

(8.) Describe a plan of implementation for the delivery of the service on a regional basis (*NOTE: The estimated time line and length of time to implement the proposal*):

The time to implement the entire project will be approximately 1 year and 10 months. The three main tasks are as follows (some tasks may run concurrently):

- Request for Information / Contracting – 4 months
- Planning / Data Collection – 6 months
- Processing / Implementation – 12 months

A detailed timeline is attached to this proposal - Attachment C.

(9.) Provide a list of potential legal obstacles to the regional provision of the service and how these obstacles will be resolved:

None Known.

(10.) Describe how the proposed service will be sustained once it is established and all grant funding has been expended:

Timely updates of the data developed constitute the main ongoing cost of this service.

This project will demonstrate economies of scale in the acquisition of GIS data products that surpass those of a regional project. It will also align the entire state on a common base set of data and update schedule with specifications that satisfy the needs of everyone. These facts will provide the incentive for private and public funding of the update of this data.

(11.) Provide a list of other public or private funding potentially leveraged by the project proposed herein.

Grantor	Amount of Funding	Purpose
CT Dept. of Emergency Services and Public Protection	\$235,000	Public Safety Planning
CT Dept. of Transportation	\$235,000	Transportation Planning

(12.) Percent of municipalities in the applicant organization participating in the proposed regional service project: 100% (169/169).

(13.) Attach hereto a resolution by the legislative body of each municipality affected by the proposal, endorsing such proposal.

(14.) Attach the following material:

1. A site location map of the project location, (not the region or EDD), if applicable - Please see Attachment E
2. A proposed Project Schedule - Please see Attachment C
3. Project cost estimates supporting the request for funding - Attachment D
4. A list of all necessary local/state/federal permits and approvals required for the project.

(15.) Has a copy of the proposal been sent to legislators representing the participating municipalities? Yes No

If YES, please attach copies of cover letters.

(16.) **Certification by the CEO of the Applicant Organization(s):**

I do hereby certify that the information contained herein is true and accurate to the best of my knowledge.

Signature:

Name:

Title:

Date:

(Please use following certification if more than one RPO is participating.)

(16.) **Certification by the CEO of the Applicant Organization(s):**

I do hereby certify that the information contained herein is true and accurate to the best of my knowledge.

Signature:

Name:

Title:

Date:

REGIONAL PERFORMANCE INCENTIVE PROGRAM AUTOMATED PUBLIC WORKS OPERATION PROGRAM

SUMMARY OF RESOLUTION & BACKGROUND:

This resolution will support the Greater Bridgeport Regional Council's (GBRC) proposal to the State of Connecticut Office of Policy & Management's (OPM) Regional Performance Incentive Program (RPIP) for an *Automated Public Works Operations Program*. The Automated Public Works Operations Program is a project that will allow the GBRC to develop and host a web-based Automated Vehicle Location application. Automobile Vehicle Location (AVL) is a means for automatically determining and transmitting the geographic location of a vehicle. The AVL application will map and store each municipality's vehicle fleet history, knowing the real-time location of all drivers which allows Public Works Management to meet customer needs more efficiently. In addition, the vehicle location information can also be used to verify that legal requirements are being met: for example, obeying speed limits. AVL provides expanded functionality and the ability to reduce costs and provide increased reporting capabilities.

RPIP is a grant program through the State of Connecticut's Office of Policy and Management, with the goal of producing "economies of scale" beneficial to municipalities. The program provides funds to Councils of Governments for the following types of projects: joint provision of a service or services currently provided by individual municipalities but not presently provided on a regional basis, a planning study regarding the joint provision of any service on a regional basis or shared information technology services.

KEY CONSIDERATIONS:

- This project will automate internal work flows by capturing real time vehicle data. AVL will track vehicles on real time basis, provide reduced costs and expanded functionality to municipalities. The project will help our Public Works Departments efficiently manage vehicles, equipment, resources and man hours.
-

COST & FUNDING DETAILS:

- GBRC will be requesting \$250,000 through RPIP for the Automated Public Works Operations Program. Funds will be used for the development of a web-based application.
 - No local or regional match is required.
-

OTHER REQUIREMENTS:

- Each participating municipality's legislative body must approve a resolution in support of the proposal by March 31, 2015.



GBRC

Greater Bridgeport Regional Council

Bridgeport • Easton • Fairfield • Monroe • Stratford • Trumbull

December 30, 2014

Ms. Sandra Huber
RPI Program Coordinator
State of Connecticut
Office of Policy & Management
Intergovernmental Policy Division
450 Capitol Avenue, MS #54ORG
Hartford, Connecticut 06106-1379

Dear Ms. Huber:

Attached is the Greater Bridgeport Regional Council's grant application to the State of Connecticut Office of Policy and Management's FY15 Regional Performance Incentive Program. We are proposing to create a *Public Works Tracking Platform* that will support the needs of all six of our member municipalities: the City of Bridgeport, Town of Easton, Town of Fairfield, Town of Monroe, Town of Stratford and the Town of Trumbull. Attached is our grant application, supporting documentation and letters confirming that our proposal has been submitted to all of the legislators representing the participating municipalities.

If you have any questions or concerns, please do not hesitate to contact me, I look forward to hearing from you.

Sincerely,

Brian Bidolli

Enclosure

525 Water Street, Suite 1 • Bridgeport, CT 06604
V: 203-366-5405 • F: 203-366-8437 • www.GBRCT.org



Regional Performance Incentive Program

Pursuant to CGS Section 4-124s

As amended by PA-13-247

Form RPI-2

Rev. 09/2014

Proposal for Joint Provision of Service(s) or Study to be filed with the Secretary of the Office of Policy and Management

Submit to: Office of Policy and Management,
450 Capitol Ave. MS #54 SLP
Hartford, CT 06106-1379,
Att: RPI Program

Attach additional pages if necessary; identify project and related proposal element at the top of page.

Applicant Entity (RPOs; Two or more Municipalities acting through an RPO; and/or Economic Development Districts):	
Name	Greater Bridgeport Regional Council
Address	525 Water Street, Suite 1
City/State/Zip	Bridgeport, Connecticut 06604
Contact Person(s):	
Name	Mr. Brian Bidolli
Title	Executive Director
Telephone	203-366-5405
Fax	203-366-8437
E-mail	bbidolli@gbret.org
Amount of Regional Performance Incentive Funding Requested: \$250,000	
Short Descriptive Title of Project: Public Works Tracking Platform	
REQUIRED PROPOSAL ELEMENTS Items (1) through (15):	
<p>(1.) Proposed Shared Service(s) or related Study: Describe at least one service currently provided by a participating municipality or municipalities or study of the provision of such service, which is not currently provided on a regional basis, for which this proposal is being submitted (attach additional pages as necessary):</p> <p>The proposed shared service is the backend infrastructure platform of a Public Works Automated Vehicle Locator (AVL) service and Work/Request Tracking System that will be known as the <i>Public Works Tracking Platform</i>. The Town of Trumbull recently engaged the Greater Bridgeport Regional Council (GBRC) in the development of an AVL Service and Work Tracking System targeted at the automated tracking of the Leaf Collection and Snow Operations. This system is based on a set of tools developed by the Town of South Windsor, Connecticut. The proposed shared service will expand the scope of the Town of Trumbull's system to other system functions including but not limited to a Call-Before-You-Dig (CBYD) automated location review and Citizen Engagement Service Requests. This robust platform will be expanded to serve municipalities throughout the Greater Bridgeport Region.</p>	
<p>(2.) Describe the need for such service (attach additional pages as necessary):</p> <p>The development of a web-based municipal public works platform will provide valuable real-time</p>	

information and tracking capabilities for the public works vehicles of all the region's municipalities. Along with their daily activities, public works departments are tasked with managing many time sensitive initiatives including leaf collection, snow removal, and Call Before You Dig (CBYD) requests. During emergency events the ability to track municipal vehicles is paramount for effectively managing emergency operations.

Tracking the movement of public works vehicles will reduce redundancies while creating more streamlined and cost effective procedures. During the fall, public works vehicles are used for leaf collection. By using this web-based system a municipal public works department will be better able to plan for vehicle routing, track leaf collection times and locations, and provide the public with more detailed scheduling information. Additionally, this same information will be used during snow removal to ensure equitable and timely removal of snow throughout the community.

In addition to tracking leaf and snow removal, funding through this program will support the creation of an automated CBYD tracking system. Across all municipalities, CBYD requests are normally handled through local public works departments. Depending on the number and frequency of these requests, effective management can become very difficult. The GBRC will use the automated email generated through CBYD requests to create location specific work tickets for all CBYD requests. This system will allow for more accurate tracking of, management of and prompt service for CBYD requests.

Finally, during natural disasters and other emergency operations, placing the correct asset in the critical location will help to reduce property damage and potential loss of life. The ability to track the real-time location of municipal vehicles and position them according to incoming incident information will create more streamlined incident management processes.

(3.) Describe the method of delivering such service on a regional basis and the organization responsible for delivering such regional service or study:

The Greater Bridgeport Regional Council will assess and evaluate municipal public works department functional needs in regards to automating or semi-automating the recording of work requests and work completed by municipal public works departments' staff. Certain work functions include required or scheduled roadway tasks such as snow operations, roadside leaf pickup and/or roadway repair/maintenance. Other work functions may be driven by citizen requests such as pothole repair, fallen trees, etc.

The GBRC will deploy and maintain the core infrastructure within the Amazon Web Services cloud, leveraging existing investments through the State of Connecticut's Regional Performance Incentive Program and by the Town of Trumbull in ESRI and Latitude Geographics technologies. The primary technology that supports the collection and analysis of real-time data is the ESRI GeoEvent Processor. GBRC will contract for the development of the various functions and tools that will ultimately comprise the Public Works Tracking Platform based on the initial needs assessment and evaluation. GBRC and municipal staff will work together to generate any specific GIS layers needed for the system to function. These layers include but are not limited to snow collection areas, leaf collection areas and generalized underground utility zones. It is not expected that any intensive data development will be conducted as part of this project, as the development of new data will be primarily related to work management zones/areas.

The GBRC will allocate a portion of the funding for procurement of several modems, GPS antennas and related hardware, services and installation for the Public Works Tracking Platform.

(4.) Describe the population that will be served (we are not looking for population numbers,

but rather whether a project serves an entire region(s), applicant towns, or any particular segment of the population such as “disabled residents dependent upon public transportation” or “residents in need of ‘affordable housing’”, etc.):

The Public Works Tracking Platform will serve the 318,000+ residents of the City of Bridgeport and the Towns of Easton, Fairfield Monroe, Stratford and Trumbull.

As communities across the State of Connecticut continue to look for opportunities to operate more efficiently and reduce operating costs, the Public Works Tracking Platform will streamline the approach to providing services for the Region’s public works departments and will provide cost savings for taxpayers.

Each community within the Region is responsible for providing a wide range of municipal services to the public, including refuse and recycling collections, street and park maintenance, street sweeping, snow and ice control, etc. Providing these services has become both inefficient and expensive for public works departments. The development of a customized, web-based, Public Works Tracking Platform will be beneficial to the Region’s communities and all residents as the platform will support real-time tracking and user-defined reports of vehicle locations and activity. Ultimately, information captured by the AVL will be made available to residents and businesses via each municipality’s web-based viewer.

The AVL will be web-based so as to allow municipal staff to monitor fleet status from any web enabled device authorized by the City or Town. The platform will support better management of resources and equipment during storms, emergencies and routine activities. These efficiencies include quickly getting the right equipment to the right place, eliminating employee misuse of equipment, improving diagnostic and repair capabilities, responding to emergencies, and saving on fuel, repairs and replacement costs by reducing mileage.

(5) Describe the manner in which regional service delivery will achieve economies of scale:

Given the total amount requested as compared to the total property tax revenue within the budgets of the six municipalities cooperating in this grant application, this program will reduce the mill rates of each town by as much as ¾ of a percent. It is also likely that this scale of mill rate reduction would grow over the years as the municipalities increase the use of the Public Works Tracking Platform in daily operations and further realize efficiencies. As Question 7 illustrates below, the Public Works Tracking Platform is a sound investment and can accrue significant reductions in costs and increases in benefits both over the short and long terms.

In order to implement AVL, each community needs an extensive hardware and software infrastructure. The acquisition, installation, licensing, maintenance and support of this network is complex and expensive, with many of the Region’s towns lacking the experienced personnel and resources necessary for development and sustainment. The Greater Bridgeport Regional Council has already achieved economies of scale, as it was awarded \$1,400,000 in 2012 for a Regional GIS Program that included acquisition and installation of web or cloud based server infrastructure; Global Positioning System (GPS) equipment, software and maintenance, Environmental Systems Research Institute (ESRI) hardware, software, maintenance and support services, base mapping and oblique imagery data, parcel data development and cloud hosting. Economies of scale were achieved through bulk and volume capital purchases, distributed capital

and operational costs and benefits, and development of standardized data, applications and training. The AVL platform will build upon the robust GIS infrastructure that the GBRC developed and currently provides to all six of the Region's municipalities.

As a majority of the infrastructure for AVL has already been established, the costs associated with this project include consulting, staff time and system updates. One bid for consulting and system update services will cost less than the equivalent number through separate bids, saving our member communities time and money.

(6.) Provide the amount by which participating municipalities will reduce their mill rate as a result of the savings realized (Exclude grant funds from calculations.):

Municipality	Savings	Mill Rate Reduction
City of Bridgeport	\$384,429	0.054%
Town of Easton	\$284,362	0.215%
Town of Fairfield	\$324,909	0.030%
Town of Monroe	\$283,947	0.123%
Town of Stratford	\$339,588	0.072%
Town of Trumbull	\$320,533	0.072%

(7.) Provide a cost benefit analysis for the provision of the service by each participating municipality and by the entity submitting the proposal:

Public works departments, and by extension municipal governments, often face uncertainty when they budget for snow removal, leaf collection and emergency events. Although natural phenomena cannot be predicted, better organization and prioritization of needs can greatly reduce the cost of providing municipal services during these events. Tracking public works vehicles will decrease redundancy in snow removal efforts, leaf collection, street sweeping and daily operations by allowing management to view the real-time locations of vehicles and the number of times those vehicles have traveled along any street within the municipality. Increased accountability will allow managers to more accurately track the real-time location of moving assets while reducing potential municipal liability.

With more than 1,300 miles of local roads distributed among the Region's six municipalities, a tremendous amount of effort is necessary to maintain every road. Without real-time tracking, municipal snow removal, leaf collection and street sweeping vehicles may pass over the same road multiple times. Given that most municipalities pay overtime for every hour that plow trucks are on the road, effective management can greatly reduce municipal costs over the course of the winter storm season alone.

The cost of implementing this Public Works Tracking Platform is considerably lower than normal. The underlying architecture of the web-based viewer and full implementation of the viewer was funded by previous grants through OPM's Regional Performance Incentive Program and CT DECD.

As AVL/GPS Systems are a new phenomenon in regards to roadway and highway maintenance, quantitative data that defines the benefits is not readily available. However, according to a recent study by the University of Kansas, "AVL can provide a significant benefit to highway maintenance operations"¹ The study, which was sponsored by the Kansas Department of Transportation, concluded that AVL's "cost-benefit ratio is almost certainly greater than 1, and probably greater than 20." The study goes on to state that "a moderate estimate of the net present value of statewide implementation ranges from \$233 million to over \$433 million over 20 years, depending on the implementation schedule." As such, AVL has the potential to improve efficiency and effectiveness of highway maintenance operations due to well-established technology and precedent among transportation agencies from which to learn.

A report by the Transportation Research Board of the National Academies concluded that "in addition to the 10% materials savings that DOTs in the US and Canada have reported, automated data collection associated with GPS/AVL is saving DOT maintenance forces thousands of hours filling out paperwork, boosting morale as well as effectiveness. Washington State (WS) DOT estimated the agency and public benefit from an additional 10,000 hours per year that maintenance employees are out plowing instead of filling out paperwork, equating to a biennial savings of \$700,000 in labor costs."² The State of Washington will begin to use their GPS/AVL equipment to help automate documentation of the maintenance that staff performs on the state's permanent stormwater control structures in the right-of-way, associating hours worked with GPS located stormwater facilities, to better understand life cycle costs, maintenance requirements, and document and communicate maintenance needs to the state legislature, for better funding. A similar study has also been published by the Western Transportation Institute.

(8.) Describe a plan of implementation for the delivery of the service on a regional basis

(NOTE: The estimated time line and length of time to implement the proposal):

It is anticipated that all of the proposed components of this project will be completed or contracted within two years. Please see Attachment 2 that illustrates the project schedule.

(9.) Provide a list of potential legal obstacles to the regional provision of the service and how these obstacles will be resolved:

The only foreseen potential legal obstacles relate to data ownership, data sharing and Freedom of Information Act (FOIA) Requests for GBRC and member municipalities. The GBRC will draft a Memorandum of Understanding (MOU) which will be reviewed by the GBRC's Geospatial Technical Advisory Committee (GTAC) and legal counsel, voted on by the GBRC Board and adopted by member communities.

(10.) Describe how the proposed service will be sustained once it is established and all grant funding has been expended:

The sustainability of the Public Works Tracking Platform is the upmost concern to the GBRC. GBRC's existing GTAC will develop policies for GBRC and member municipalities to implement, which will foster the success of the platform. Critical to the success of the Platform is the development of consistent policies adopted in all member communities. A large portion of the Platform can and will be sustained through GBRC's existing Regional GIS program.

¹ Meyer, Eric and Ishtiaque, Ahmed. "Benefit-Cost Assessment of Automatic Vehicle Location (AVL) in Highway Maintenance." (2013) 1-14. Web. 28 Dec. 2014.

² Venner, Marie. "Global Positioning System (GPS)/Automatic Vehicle Location (AVL) Use, Challenges, and Cost-Benefit in Operation." Transportation Research Board (2013). Web. 28 Dec. 2014

(11.) Provide a list of other public or private funding potentially leveraged by the project proposed herein.

Grantor	Amount of Funding	Purpose
State of Connecticut Office of Policy & Management (OPM)	\$1,400,000	Regional GIS Program
State of Connecticut Department of Economic and Community Development (DECD)	\$275,000	Development of a Brownfields GIS System/Economic Development Site Selector
Town of Trumbull	\$34,000	Development of an AVL System (Public Works)

(12.) Percent of municipalities in the applicant organization participating in the proposed regional service project:
100% (6 of 6)

(13.) Attach hereto a resolution by the legislative body of each municipality affected by the proposal, endorsing such proposal.

Please see attached a Resolution from the Greater Bridgeport Regional Council endorsing the proposal. Each municipality will provide a resolution by the March 31st deadline.

(14.) Attach the following material:

- 1. A site location map of the project location, (not the region or EDD), if applicable:**
Please See Attached.
- 2. A proposed Project Schedule (Outline the Proposed Project timeline).**
Please See Attached.
- 3. Project cost estimates supporting the request for funding.**
Please See Attached.
- 4. A list of all necessary local/state/federal permits and approvals required for the project.**
No local/state/federal permits or approvals are required for this project.

(15.) Has a copy of the proposal been sent to legislators representing the participating municipalities? Yes No

If YES, please attach copies of cover letters.
Please see attached.

(16.) Certification by the CEO of the Applicant Organization(s):

I do hereby certify that the information contained herein is true and accurate to the best of my knowledge.

Signature:



Name: Brian Bidolli

Title: Executive Director

Date: December 22, 2014

Attachment – Resolution



GBRC

Greater Bridgeport Regional Council

Bridgeport • Easton • Fairfield • Monroe • Stratford • Trumbull

**RESOLUTION OF THE
GREATER BRIDGEPORT REGIONAL COUNCIL**

REGIONAL PERFORMANCE INCENTIVE PROGRAM

Bridgeport, Connecticut

I certify that the following is a true copy of the vote of the Greater Bridgeport Regional Council on December 16, 2014 in Bridgeport, Connecticut, a quorum being established:

RESOLVED, that the Council adopted a resolution by the vote of 6 to 0 to endorse the Regional Performance Incentive Program proposal for an *Automated Public Works Operations Program*, as referenced in Connecticut General Statutes Section 4-124s (2014 supplement).

The Secretary is authorized to impress the seal of the Greater Bridgeport Regional Council on any such documents, amendments, rescission, or revision.

Date at Bridgeport, Connecticut, on December 16, 2014

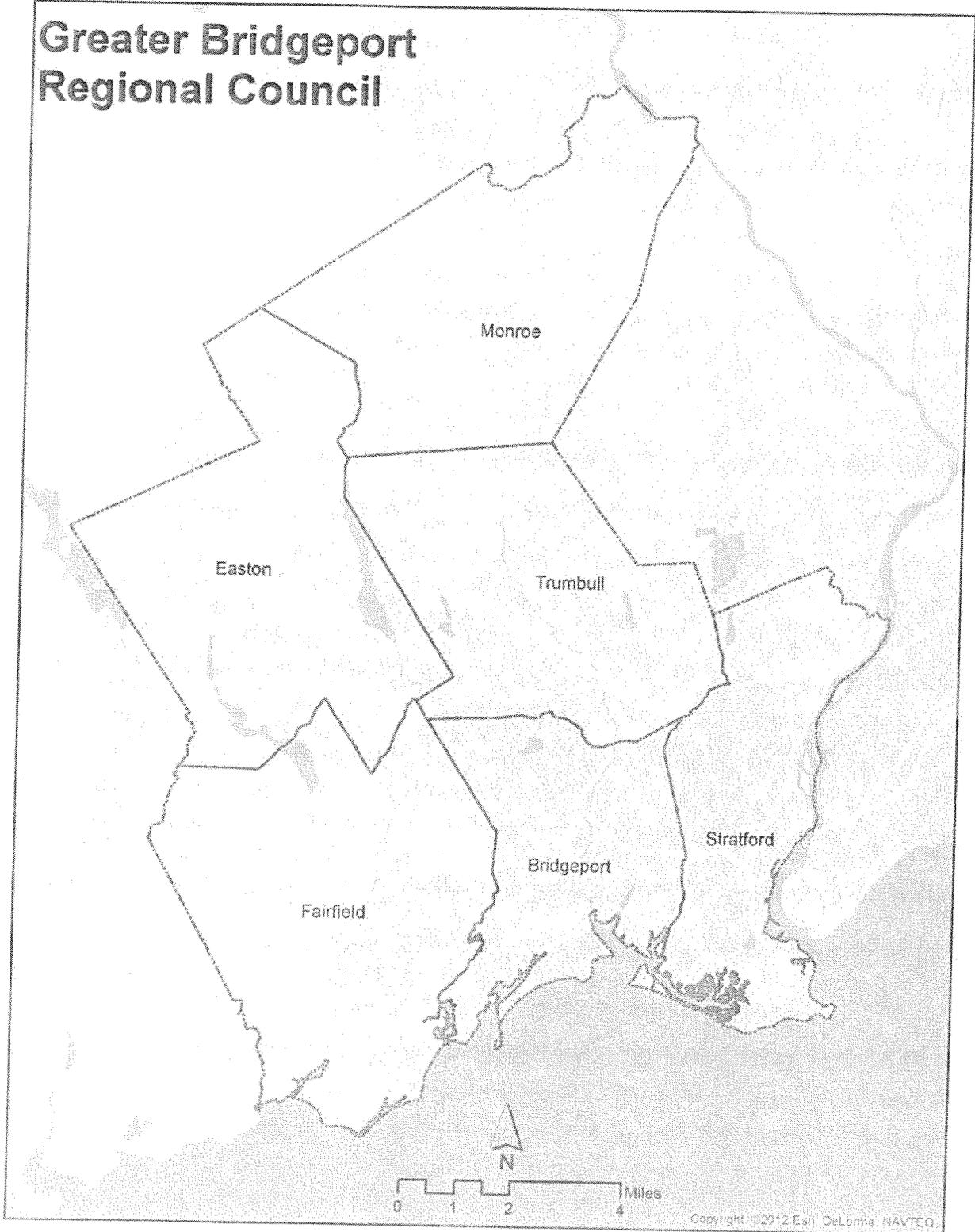
Agency: Greater Bridgeport Regional Council Secretary

Michael C. Tetreau, Secretary

AGENCY SEAL

Attachment 1 – Site Location Map

Greater Bridgeport Regional Council



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Attachment 2 – Proposed Project Schedule

Attachment 3 – Project Cost Estimates

Project Budget for GBRC's Public Works Tracking Platform

Item:	Description:	Cost:
Personnel	Salary & Fringe Benefits of GIS Director, GIS Specialist, Regional Planner and Senior Transportation Planner	\$90,000
Contractual	Application Development	\$50,000
	Amazon Web Services	\$24,000
Equipment	AGS Advanced Enterprise Production (Upgrade)	\$18,000
	AGS Advanced Enterprise Staging (Upgrade)	\$9,000
	GeoEvent Staging	\$4,865
	GeoEvent Production Maintenance	\$2,500
	GeoEvent Staging Maintenance	\$1,250
	AGS Advanced Enterprise Production Maintenance (Upgrade)	\$5,000
	AGS Advanced Enterprise Staging Maintenance (Upgrade)	\$2,500
	Wireless Modems, GPS Antenna, Other Hardware & Installation Services	\$30,000
Contingency		\$12,885
	Total Project Cost:	\$250,000

Attachment 4 – Local/State/Federal Permits & Approvals