

Niagara River Greenway Commission Greenway Related Projects and Programs

WORLD WEATHER CENTER WEATHER CITIZEN SCIENTIST[™] APP

PROJECT CONSULTATION and PROJECT REVIEW

For Funding

September 18, 2018

September 18, 2018

Project Coordinator Niagara River Greenway Commission PO Box 1132 Niagara Falls, New York 14303

Re: World Weather Center Weather Citizen Scientist[™] App

Dear Project Coordinator,

The World Weather Center (WWC) is pleased to apply for Commission funding to support the Weather Citizen Scientist[™] App to be an integral element of the World Weather Center, a NYS 501(C) (3), Not for Profit organization. This element in the development of the WWC is very important to the success of our effort in establishing a tourist destination in the City of Niagara Falls, New York that is educational, scientific, immersive, and entertaining.

Should we be successful in gaining approval of our funding effort with the Commission and the Host Community, it is vitally important that funding is available during the first quarter of 2019. We appreciate all of the timing consideration available to achieve this benchmark and that we have many responsibilities too.

We look forward to your comments and potential support in this innovative, unique application of technology that will engage our Weather Citizen Scientists[™] to observe, question, record, communicate, and evaluate the impact of the weather within and outside of the Corridor.

Thank you for this opportunity.

Best regards,

WORLD WEATHER CENTER

John R. Simon Executive Director

Project Registration Number_____

Niagara River Greenway Commission Consultation and Review Form

Type of Review Required: ____x__ Mandatory Consultation _____ Voluntary Review and/or Endorsement **PROJECT SPONSOR INFORMATION** Name: World Weather Center Mailing Address: 3845 Tonawanda Creek Road, East Amherst New York Zip Code: 14051 State: Federal ID# 26-4381720 Charities Registration # 170(b) (1) (A) (vi) PROJECT TYPE Check all that apply: ___x__Environmental _____ Cultural/Heritage ___x__ Land or Water Public Access __x___ Cultural ____x___ Educational/Interpretive x Trail ___x___Waterfront or Land Based Development ______ Signage ____x__ Other ____x Recreational Funding Committee ____x___ Host Community Standing Committee Request: _____ Buffalo and Erie County Standing Committee Ecological Standing Committee _____ State Parks Standing Committee Unsure at this time

PROJECT INFORMATION

Project Name: World Weather Center, Weather Citizen Scientist[™] App Location: World Weather Center (One Niagara)

Site Address: 360 Rainbow Blvd., Niagara Falls

State: New York Zip Code: 14303

Minor Civil Division(s): Niagara Falls

County: Niagara

Project Proponent Property Interest (own, lease, easement or other): In the process of acquiring the building and property. (See Attached Letter)

AUTHORIZED OFFICIAL

Name: John R. Simon Title: Executive Director

Business Address: 3845 Tonawanda Creek Road, East Amherst

State: New York Zip Code: 14051

Telephone Number: 716.864.6984 Cell Number: 716.864.6984

Fax Number: 716.688.5922

E-Mail Address: jrsimon1@roadrunner.com

PROJECT POINT OF CONTACT

Name: John R. Simon Title: Executive Director

Organization/Firm: World Weather Center

Business Address: 3845 Tonawanda Creek Road, East Amherst

State: New York Zip Code: 14051

Telephone Number: 716.864.6984 Cell Number: 716.864.6984

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PROJECT NARRATIVE

1. World Weather Center Citizen Scientist[™] App Description: Over the past 30 years, there has been an increasing and high degree of public interest in weather. Research shows that weather has been and continues to be among the top public topics of interest. Local TV stations' annual audience research demonstrates this to be true, even in quieter weather markets. Network and print research show a similar level of interest, which is why weather—often focusing on extreme weather events and their impacts—is typically included on national newscasts, placed high in the show, and is a staple of local newscasts. The Weather Citizen Scientist[™] App will be a modern, technological way for people to communicate, initially one to one, and lead up to MultiCoRelational groups, about how the weather impacts the environment, health, economics, wild life, energy, agriculture, transportation, recreation, and sustainability.

While the fundamental processes of science, knowledge creation, dialog, and argumentation have been investigated for 1000s of years, only recently have relevant technologies been available for facilitating and augmenting "Collective Intelligence" (CI) on a large scale.

Three technologies in particular-social networking, the web, and machine learning- are the foundation for a number of ongoing research programs and products aimed at various elements of achieving CI. The near-universal familiarity and ubiquity of social networking technology provides the means for computer-mediated communication grounding CI. The web provides the "common space" in which "Weather" artifacts of CI can be created, stored and manipulated. And, contemporary machine learning affords the opportunity to augment human intelligence in substantial and valuable ways.

The participant will enter this weather citizen science multilevel App program and be guided to establish relationships around the world, while focusing and reporting on what is personally important to them concerning the weather. Whether it is research or finding information and a potential solution to an issue (i.e. health, pain, flooding, storms, and economics) caused by certain weather related conditions, this "MultiCoRelational" experience seeks knowledge, truth, and value to the participant. All of this information is intended to be developed and experienced through a "Weather Citizen Scientist[™]"</sup> App accessed through the WWC website, www.worldweathercenter.org.

World Weather Center ("WWC") Concept. WWC is a proposed destination visitor attraction serving regional residents and tourists. The attraction will be in the highly visible, former One Niagara building, sometimes referred to as the Cube Building, which also houses One Niagara Welcome Center. WWC will offer multi-sensory weather-related exhibits and experiences that will have broad appeal to children, families, and adults due to the mass appeal, awareness, and popularity of weather reporting, extreme weather events, and climate science. A signature building and experience design and state-of-the art exhibits and programs will provide visitors with both visceral experiences related to extreme weather as well as in-depth opportunities to learn about weather, life and public safety, and climate from their formation and causes, to the many variations depending on location, season, topography, etc. Climate science and more recently the impacts of human activities will be interpreted. WWC intends to engage, educate, and excite visitors of all ages about weather's impact on everyday life as well as the importance to the future of planet Earth.

A specific focus will be on the regional impact of weather in the western New York and southern Ontario area. The sharing of information relative to the Mission of the WWC and promoting the understanding and science of the weather will be realized. Regional relationships will be sought among the hundreds of K-12 school systems throughout western New York and Ontario, Canada. This effort will be led by our <u>Weather Citizen Scientist™ App</u>. Utilizing proprietary IP software developed by the Charles River Analytics company and engineered through the Partnership of ThoughtSigns, Inc. and Charles River Analytics, children and adults of all ages will have an opportunity to develop knowledge, truth, and value through this multi-co-relational experience that engages OUr users to move through various levels of interaction of inquiry on weather related topics. Examples of these weather impact topics include: health, economics, quality of life, wild life, energy, agriculture, transportation, recreation, environmental, and sustainability.

Both the average citizen and scientist from around the world seek understanding and in some cases answers to why and how this/a weather phenomenon happens. The WCC intends to offer our guests and App accounts (individual and collective members) the opportunity to become more familiar, through Collective Intelligence, with the variety of questions and concerns of all facets of weather related issues including the impact of weather.

Weather Ambassadors[™], in local and regional school systems will collaborate on weather related topics. Regional colleges and universities are currently being engaged in supporting and participating in the WWC.

Key to the WWC is the collaboration with the multitude of both regional and international stakeholders. Relationships have been or are being developed with IBM's The Weather Company, The Weather Channel, and the Weather Underground. The sharing of information relative to our Mission and promoting the understanding and science of weather will be realized.

Provided that our Niagara River Greenway Commission Application is approved in November 2018, we hope to begin the development of the Weather Citizen Science[™] App during the 1st qt. 2019, and launch it within six (6) months. This is a critical timeframe so that the WWC can develop an awareness and marketing program prior to the repurposing of the existing building.

2. Referring to the Niagara River Greenway Plan, clearly document and describe how the proposed project will advance the Niagara River Greenway vision including the goals, principles, and criteria that define that vision.

The WWC Citizen Scientist[™] App will promote the <u>Vision</u> of the Niagara River Greenway by supporting a discovery process involving thousands of people communicating on the impact and effect of weather on all aspects of life, environment, and sustainability within the Greenway Corridor. The WWC is designed to be a world class destination utilizing world class technology, such as our Weather Citizen Scientist[™] App. Recognizing that the Niagara River Greenway is a corridor of many different natural and man- made experiences including our rivers, streams, canals, parks, and landscapes, the Weather Citizen Scientists[™], through our App, will be able to hare and interpret the impact of weather. We will not only discover the impact of weather in the Corridor, but celebrate what we have and how we may be able to sustain it. The Weather Citizen Scientist[™] App incorporates all of the Principals, Goals, and Criteria set forth by the Niagara River Greenway, and the Project will support by its very nature an accessible, unified, environmentally friendly process promoting the understanding of the weather impact on and in the Corridor.

Public Participation

The World Weather Center Weather Citizen Scientist[™] App is the ultimate process of engaging the public to participate in a collective way to discover the impact of weather in the Corridor. As each Citizen Scientist uses the App., more and more people become engaged in the process of communication with each other forming Collective Intelligence.

<u>The World Weather Center Weather Citizen Scientist™ App will meet the Principles of the Niagara River</u> <u>Greenway by:</u>

Excellence- The WWC and its App are committed to the development of world class experiences necessary to fully engage our customers and App users in discovering understanding weather and its impact on our environment. To achieve this excellence, we have identified world class concept, design, and technology partners such as ThoughtSigns, Inc. and Charles River Analytics to develop our App.

Sustainability- The WWC will promote the operation and maintenance of the App. This will lead to the sustainability of the Corridor as valuable knowledge is gained through a collective intelligence process on the impact of weather.

Accessibility-The WWC App is the ultimate way to engage all people via a friendly, electronic process of discovering weather's impact on the Corridor. Aside from the anticipated tools that the Weather Citizen Scientist[™] might use (smartphone, tablet, P.C.), the App will be able to be used by people who are of a different culture who may also speak and read languages other than English.

Ecological Integrity-The WWC App promotes the observation and discussion of the weather's impact on many aspects of living things and the environment. As such, we will be able to quantify events caused or impacted by the weather and continue to monitor the experience.

Public Well-being-The WWC App promotes the investigation by our Citizen Scientists into those events caused by the weather. This will bring about a sense of public well-being. The Citizen Scientist will be in a position to report changes caused by the weather to the environment and be literally, "on the front line" in the know.

Connectivity-The WWC App will connect thousands of Weather Citizen Scientist[™] throughout the Corridor in ways that have yet to be either suggested or achieved. MultiCoRelationships will be developed creating "Collective Intelligence" on Weather related changes within the Corridor.

Restoration-The WWC app will promote the restoration of weather related change in the environment of the Corridor by first, recognizing that an event has happened (sighted by a Weather Citizen Scientist[™]), shared with other Citizen Scientists, and eventually discussed for potential restoration or remediation.

Authenticity-The WWC App will support the action of "participation" in a higher sense of personal and collective responsibility that reflects the traditional spirit and heritage of the area.

Celebration-The WWC app will be designed to celebrate what the elements of the Corridor are as to what was here, what is happening now as a result of the weather, and how we can protect in the future our local history, cultural resources, and environment. The MultiCoRelational experiences and sharing of information will only strengthen the knowledge of not only the Citizen Scientists, but those people and institutions that follow the information through published reports.

Partnerships-The WWC App focuses on the impact of Weather in the Corridor. Fortunately, the information discussed by thousands of Citizen Scientists using the App will result in multiple levels of Partnerships. The Collective Intelligence will lead to, as a result of the App, the sharing of information resulting in local, regional, national, and bi-national Partnerships. This would include both public governmental entities and private entities.

Community Based-The WWC, and the proposed App, have the support of many political and private organizations in Niagara and Erie County. The information on the impact of Weather, historical and

potential, within the Corridor will allow the public sector to plan accordingly, improve budget allocations, and offer both remedies and prevention of future weather related events.

<u>The World Weather Center Weather Citizen Scientist™ App will meet the Goals of the Niagara River Greenway</u> <u>Commission by:</u>

Improve Access-Whether our Weather Citizen Scientist[™] is a casual visitor or recreational participant in the Corridor, or lives or works within the Corridor, they will have the opportunity of participating in developing information and knowledge on the impact of the weather. Curiosity will also drive many new people to the Corridor to discover what, if any, event can be documented that is weather related. With the increase of people, current and new, improved access points will be expanded by the communities.

Make Connections-As a result of the proposed WWC App, residents, tourists, visitors, and workers will find themselves developing relationships with other Citizen Scientists, along with the Corridor stakeholders. Connections will be made because of common interests in discussing, reporting, and gaining knowledge on the weather's impact in the Corridor.

Protect and Restore Environmental Systems-The WWC App will ensure that many Weather Citizen Scientists[™] are engaged in discovering, learning, and discussing the impact of the weather within the Corridor. The use of the App will add to other efforts within the region to protect and continue the wellbeing of the environment.

Celebrate History and Heritage-The WWC App users will be able to review the history of the impact of the weather on the all of the elements of life and environment within the Corridor. This celebration of history will be able to examine hundreds of years of weather's impact in such areas as: agriculture, the economy, health, seasonal and non-seasonal tourism trends, energy, transportation (especially river and lake travel), and the heritage of the various cultures, indigenous and non-indigenous populations.

Spark Revitalization and Renewal-The WWC App will promote greater Corridor access and curiosity by the citizen scientist into the weather's impact-both positive and negative. As such, accurate identification of what is happening in the Corridor is important which will result, based on the nature of people, the need to revitalize what is in need and renew what needs help. The Collective Intelligence of thousands of users provides the communication necessary to really "know" what the weather is contributing to.

Promote Long Term Sustainability-The WWC App is one of many tools that can promote Long Term Sustainability. Communication between Weather Citizen Scientists[™], growing in numbers, sharing of information and knowledge, will ensure a continued, updatable bank of information on the weather's impact in the Corridor. The WWC looks to the App as a continued, educational and scientific tool to engage the users in a way to compliment the activities within the WWC. The WWC is committed to its long term viability and activity.

Extend Olmsted's Legacy-The WWC App will contribute to the extension of the Olmsted's Legacy. Olmsted "envisioned a necklace of parks and open spaces along the length of the River from Front Park in the City of Buffalo and stretching north of the Falls." Historically, the region was affected by commercial and industrial development, and remarkably, affected by more recent weather events such as the Blizzard of 1977, the Falls Freezing over, the hurricane of the early 1950's, the flooding of the Lake Ontario shoreline. The creation of Weather Citizen Scientists™ and the corresponding App, gives the Corridor a much larger group of people to provide "Collective Intelligence" that can assist in the extension Olmsted's Legacy by identifying weather impact, quantify it, plan for remediation where necessary, and where necessary, promote an intervention in advance of further weather events.

<u>The World Weather Center Weather Citizen Scientist™ App will meet the Criteria of the Niagara River Greenway</u> <u>Commission by:</u>

Consistency with Principles-The WWC App will make a major contribution allowing for the Principles of the Niagara River Greenway Plan to be maintained by observation, discussion, categorizing, and maintaining a bank of information relating to how the weather is impacting the Corridor. The weather has a tendency to impact many aspects of life, including the environment and its sustainability. The ongoing, continuous study of the weather impact will aid the maintenance of the consistency of Principles outlined by the Niagara River Greenway Commission.

Priority Status-The WWC App will be coming to fruition at a time when the impacts of increased weather events are being seen and felt much more frequently. Climate change is happening and we need to engage our citizens to become Weather Citizen Scientists[™] to gain more information on the impact of the weather.

Focus Area-"The boundaries of the Greenway have been mapped along municipal boundaries." The WWC App will initially focus on and in the tourist regions along the Niagara River so that we can engage the Citizen Scientist who may be a tourist, resident, worker, or someone just enjoying a recreational experience such as boating, to observe, record, and start a relationship with someone of like mind and interest related to the weather.

Environmental Soundness-The environmental quality of the region is critical in maintaining and improving our quality of life. The WWC App will provide a unique, creative approach to engage the Weather Citizen Scientist[™] to record the weather's negative impact on the environment and in some cases, through Collective Intelligence, recommend changes to mitigate the situation from repeating itself.

Implementable-The WWC App will be created through the efforts of the Partnership of the Charles River Analytics company (https://www.cra.com) and ThoughtSigns, Inc. (<u>https://www.linkedin.com/in/jon-ray-hamann-75410b410</u>) Collectively, the Partnership is the Contractor. They will be assisted by the WWC. The Sources and Use Chart within, defines the cost to produce the App. Charles River Analytics has already spent approximately \$1,000,000 to create the proprietary IP that will serve as the foundation platform for the App.

Economic Viability-The WWC will provide all maintenance, upkeep, and administration of the App. The WWC is requesting, as part of the Niagara River Greenway Commission Application, 2 years of funding to help with the initial years costs of the maintenance, upkeep, and administration.

Availability of Local Sponsor or Partner-The WWC is committed to developing and maintaining the Weather Citizen Scientist[™] App as part of its annual budget and will assume the long-term responsibility for continued operation and maintenance. The App is a very important element of the WWC and it mission; therefore, continued operation and marketing is a component of its strategic plan.

Ability to Match or Leverage Funds-The WWC will not be able to provide matching funds during the initial years; however, as more Citizen Scientists use the App beyond the Free use levels, revenue will be generated to assist in the operations of the App. Furthermore, it is anticipated that the WWC multimillion dollar destination, housing the App, will demonstrate the leveraging of the Niagara River Greenway Commission funding.

Consideration of Other Planning Efforts-The WWC App will generate knowledge that will enhance the information and knowledge on the impact of the weather in and adjacent to the Corridor needed by the Local Waterfront Revitalization Programs and other municipal comprehensive plans. The WWC will work with these organizations by sharing the information gained by our CI.

Clear Benefits-The WWC believes that the Weather Citizen Scientist[™] App provides a clear, innovative, creative tool and process to generate collective intelligence, by the thousands of users, about the weather's impact in the Corridor.

As important, is the sharing of information with the various stakeholders allowing for much better, more quantitative, valuable collection of event data.

3. Define the budget for the proposed project and include costs for the following:

Uses of Funding

- * Planning, IP Platform Developed (CRA) \$1,000,000
- Construction of Citizen Scientist App \$ 250,000
 Marketing of App \$ 30,000
 Scalable Controlling Hardware for App \$ 20,000
 Interactive Website/App Work \$ 10,000
 Administration \$ 31,000

TOTAL PROJECT COST \$1,351,000

- * Charles River Analytics ("CRA"), Inc., Cambridge, Ma.
- ** Partnership between CRA and ThoughtSigns, Inc. collectively, "Contractor"

\$ 10,000

Sources of Funding

Maintenance, Upkeep / 2 Years

CRA IP Platform Software	\$1,000,000
Niagara River Greenway Commission	\$ 351,000
Total Project Sources	\$1,351,000

Identify all sources of funding and the amount of funding expected from each source. Identify and quantify funds that are already on hand or have been allocated for the proposed project. Explain how the project will be operated and maintained.

Currently, there are no funds to develop, purchase equipment, construct the App, including links, and launch the App, including the Marketing. The Project will be conducted by the Partnership of ThoughtSigns Inc. (*https://www.linkedin.com/in/jon-ray-hamann-75410b410*) and the Charles River Analytics company (https://www.cra.com). Collectively, the Partnership is the Contractor. The Marketing allocation from the Commission will pay for the regional, domestic, and international effort to have the App found, both on our website and links from other sources. The App will be managed by Staff of the World Weather Center and Maintained by the same.

4. Describe the measures taken at the local level to gain community and government support for this project (hearings, petitions, public surveys, resolutions of support or other methods). If this project has been cited or described in a local planning document or some equivalent thereof, attach copies of that documentation highlighting the sections that are relevant to the proposed project. Describe the role of municipal agencies, stakeholder groups, consultants, volunteers or others who will be involved in the proposed project.

The concept of the World Weather Center has been in the Buffalo News and Niagara Gazette for the past several years. As such, many regional people have asked questions about it which led to the conducting of a Feasibility Study. This study was completed in July of 2018 and found the WWC concept to be sound and viable. The World Weather Center Weather Citizen Scientist[™] concept emanated from the Executive Summary of the Project. The World Weather Center has been supported by many people and governmental entities. Those include the Mayor of Niagara Falls, the Planning Department of Niagara Falls, the Niagara County Manager and Legislative Chairperson, the NCIDA, the Minority and Majority Chairpersons of the Niagara County Legislature, the Director of the Niagara Global Tourism Institute, and the Niagara County Economic Development Commissioner. The Niagara IBEW fully supports the WWC as well as the Superintendent of the Niagara Falls School System. It is planned that out an annual basis, public reports on the findings of the interactions of our Weather Citizen Scientist[™] will be published. This will include the sharing of the information with the various stakeholders of the Niagara River Greenway Commission.

5. Describe and document the environmental setting and existing conditions at the proposed project site. If you are not the owner of the property include a letter(s) or resolution(s) evidencing support for the project by the owner. Provide photographs, conceptual plans and drawings that show the site as it presently exists and how the site will change with the addition of the proposed project. Describe how your project will comply with the State Environmental Quality Review Act (SEQRA). The existence of wetlands, significant upland and aquatic habitats, and plant or animal species that are classified as rare, threatened, or endangered should be noted. Explain how such natural resources will be protected and/or enhanced. Cite any relevant project-related studies.

The WWC is intended to be housed in the current One Niagara building, Niagara Falls, New York. Following the conclusion of the acquisition of site control of the building, forecast to occur during the 4th quarter 2018, the concept and engineering development will be finalized over a two year period of time. Repurposing construction is forecast to begin in the fall of 2021. Current images of the building are included and a CONFIDENTIAL repurposing image is also included in our Application for funding. Also included is a Letter from the current owner supporting our effort to get funding for the App. It is our hope following a positive approval from the Commission, to begin the development and construction of the App during the first six (6) months of 2019. We cannot begin it unless there is actual cash flow to purchase service and equipment that will be immediately located in the existing building. As the City of Niagara Falls has done before with the building, we hope that the City will take the lead on SEQRA. The App does not require any SEQRA determination or action. Consistent with the purpose of the App, the WWC will advocate in the protection of natural resources with the intent to determine the weather's effect on them so as where necessary, enhance and protect.



One Niagara Today



The Proposed World Weather Center



USGS 1:24,000 Map



PHONE: (716) 675-1200

September 14, 2018

Project Manager Niagara River Greenway Commission P.O. Box 1132 Niagara Falls, New York 14303

Dear Project Manager,

I am currently negotiating to sell One Niagara, 360 Rainbow Blvd., Niagara Falls, New York 14303 to the World Weather Center Development Corporation. I fully support the World Weather Center Application for funding for their Weather Citizen Scientist App.

I am a Principal and Manager of Niagara Falls Center for Tourism, LLC, which owns One Niagara.

The World Weather Center, a 501 (C) (3) is the intended user of the building.

Should you have any questions of me, I can be contacted at: 716-675-1200 (Office) or email: greger@regerholdings.com.

Thank you. Best regards,

Gordon J. Reger Chairman and Chief Executive Officer Reger Holdings LLC 2730 Transit Road West Seneca, New York 14224



September 13, 2018

Sergio Fornasiero President World Weather Center

Mr. Fornasiero:

I am familiar with the World Weather Center Concept and the WWC Weather Citizen Scientists App, and, as an active professional within the local-regional tourism market, I look forward to supporting and monitoring the advancement of development efforts in both areas.

Having worked on the new National Comedy Center project that has recently opened in Jamestown, I know how important a destination tourism development project can be to a local-regional community, and also how key the utilizations and combinations of new and cutting-edge technology can be to the establishment and growth of a unique and differentiated market for such tourism-generating business operations.

My understanding of the programmatic and technological intent for the World Weather Center is that it hit this mark, and my professional experience indicates that this is a necessary, credible and attainable goal.

Sincerely,

Michael & Bynchi

Michael E. Bogucki Senior Principal



School District of the City of Niagara Falls, New York

630 66th Street & Niagara Falls, New York 14304 (716) 286-4211 & FAX: (716) 286-4283

August 10, 2018

Mr. Sergio Fornasiero President, Board of Directors World Weather Center 5854 Main Street Williamsville, NY 14221

Dear Mr. Fornasiero:

It is with tremendous enthusiasm and total commitment that I write to you in support of a World Weather Center in Niagara Falls, New York. As the Superintendent of the Niagara Falls City School District, the possibilities to engage our students and community are endless.

In our school district, we pride ourselves on providing hands-on, relevant, real-life experiences for our students and their families. The educational connection, student experiences, and potential learning opportunities will open many doors for the 7,000 children we serve. Once this destination and learning attraction opens, I would respectfully request that we become an integral partner and frequent participant in the use and development of such an innovative project. This multi-sensory learning will be an absolutely unique experience that will help our City thrive.

On behalf of the Niagara Falls City School District, you will have our complete support and enthusiasm as this proposal moves forward.

Sincerely,

2RZ.

Mark Laurrie Superintendent of Schools



Mr. Sergio Fornasiero President Board of Directors World Weather Center 5854 Main Street Williamsville, NY 14221

Dear Sergio:

I am pleased to lend our support for your organization's proposed World Weather Center project that is going through the feasibility process as we speak.

The World Weather Center will be a giant boost for the Greater Buffalo-Niagara region of New York State, drawing hundreds of thousands of visitors from not only the United States and Canada, but also from our Western Hemisphere and the entire globe!

I can think of nothing better to boost our visitor count, providing a great additional activity for families who will choose to visit and stay in the Greater Buffalo-Niagara Region. The fact that it will also draw conventioneers with interest in climate studies, students to learn about the ever-fascinating phenomenon of weather, and capitalize on our great asset of the region's dynamic weather reputation are just some of the reasons to encourage all stakeholders of the Greater Niagara Region to also support the World Weather Center project.

As you know, our Niagara Falls area and Niagara County is in dire need of a way to get year 'round employment in the tourism and hospitality sectors. The World Weather Center will be the catalyst to change this dilemma. It is our hope that you succeed with this venture for the sake of all of us who live and work in this community!

Do not hesitate to pass along my contact information to anyone who would like me to further explain our support for your program: <u>pwhalen@niagara.edu</u>. Phone: 716-524-2575 or cell: 716-481-8051. Thank you.

Sincerel

Patrick J. Whalen Director

225 Old Falls Street (Power City Building) Niagara Falls, NY 14303 Phone: 716-524-2576



City of Niagara Falls, New York

P.O. Box 69, Niagara Falls, NY 14302-0069

City Hall 745 Main Street

Paul A. Dyster Mayor

Website: www.niagarafallsusa.org e-mail: paul.dyster@niagarafallsny.gov

> Phone: (716) 286-4310 Fax: (716) 286-4349

October 10, 2017

Re: World Weather Center (WWC) Project in Niagara Falls

To Who It May Concern,

I strongly support the World Weather Center (WWC) concept. The WWC not-for-profit are a group of locally based individuals who see both the potential and the need in Niagara Falls for major new attractions that can function year-round.

The City of Niagara Falls plays an important role in New York State, attracting millions of visitors to Western New York to behold the beauty, power and majesty of this natural marvel. We are one of New York's - and the world's - greatest economic asset and one of the most beautiful natural resources. It is a City whose history includes first nations, European exploration and Colonial wars, as well as, abolitionist, industrialist, and environmentalist movements and that informed society throughout North America's history. And while Niagara Falls still holds important historic relevance in need of interpretation, there is no doubt that it has evolved as a place that not only commands the world's attention but its attraction. There is no better public stage to expose the world to the importance of climate and its impact on the planet humans call home.

The project sponsors are actively working to bring this concept to reality and to locate the Weather Center in downtown Niagara Falls. Should they be successful, the project would realize a major objective for tourism, which is to focus on building attractions that offer visitors experiences different then those of the waterfalls and the park experience. Achieving Niagara Falls' future will require us to support this and other projects like it that will bring new experiential offering into the market here and that have real potential for expanding visitor spend and length of stay.

The development of significant new attractions, like the WWC, at Niagara could be particularly important in strengthening the regional tourism offering. Therefore, all of us in the public sector have a reasonability to encourage developments, like the WWC, and to assist those working to bring them to reality.

Thank you, and should you require any further information, please do not hesitate to contact me at 716-286-4310.

Sincerely,

Paul A. Dyster

Mayor



City of Niagara Falls, New York

P.O. Box 69, Niagara Falls, NY 14302-0069

DEPARTMENT OF PLANNING ENVIRONMENTAL & ECONOMIC DEVELOPMENT Office of Planning

July 1, 2016

Christopher Schoepflin Empire State Development 95 Perry Street Buffalo, NY 14204

RE: International Weather Experience Center - Market & Economic Feasibility Study

Dear Mr. Schoepflin:

As Acting Director of Planning Environmental and Economic Development in the City of Niagara Falls, I strongly support the request for funding to complete a Market & Economic Feasibility Analysis for the proposed International Weather Experience Center (IWEC).

As you may know, the primary goal of this analysis is to determine if the development of the IWEC facility has economic merit and to use the information to develop a strategic plan for fundraising that is required to support the scope and sustainability of the project. Completion of this study should be seen as a critical step in determining the viability of the concept when compared to competition in the marketplace, as well as, in measuring the strength of its potential return-on-investment, and ultimately, a critical step in bringing the concept to reality.

The sponsors are actively looking to locate the Weather Experience Center in downtown Niagara Falls. Should they be successful the project would realize a major tenet of the Niagara Falls Comprehensive Plan (Cultural District) as well as on-going USAN development policies that seek to develop world-class attractions that can match the world-class scenery of Niagara Falls. Moreover, the development of a major "experiential attraction," such as the IWEC, certainly has the potential to generate large direct, indirect, and induced economic impacts for the City, the Region and the State. Knowing then the relative dimension and impact of this type of development project —its construction and operating costs, site analysis, and financial sustainability are all important in determining validity of the IWEC's short and long term goals but also those of the region's in this regard.

The development of significant new attractions at Niagara is seen as the next phase of strengthening the tourism sector over the short to intermediate term.

Thank you for your continuing interest in efforts to redevelop downtown Niagara Falls. Should you require any further information, please do not hesitate to contact me at 716-286-4477, or via e-mail at <u>DeSantis@nfez.org</u>

Sincerely, Thomas J. DeSantise AICE Acting Director

THOUGHTSIGNS, INC. -- TECHNOLOGY PARTNER of WORLD WEATHER CENTER DEVELOPMENT PROPROSAL to Build a *CITIZEN SCIENCE APP*

PROPOSED:

To build the app within 6 months from the date of funding of \$250,000.

SCHEDULE: Projected cost and time for four sequential periods defined by the engineering tasks:

1st - collect data & information, design & plan; 25k; ½ mo; 2nd – Draft Specification; 50K; 1 mo; 3rd – Build app; 100K; 3 mo; 4th – implement, test, modify as needed and release; 75k; 1&1/2 mo;

TECHNOLOGY BACKGROUND:

ThoughtSigns, Inc. (TSI), is the developer of the *AutoGnome* class of intelligent technology derived from a formal theory of mind distinct from those underlying the vast majority of previous and current Artificial Intelligence (AI) and Machine Learning (ML) approaches. This self (*auto*) knowing (*gnomic*) mind autonomously creates and applies its own interpretation of the world to satisfy its intentions. This novel feature means the AutoGnome model is equally applicable to both *personal* and *collective* intelligence at different levels and forms—from bacteria to humans, from swarms to nations.

TSI's mission is to facilitate human prosperity through amplified intelligence. In order to manage this mission, TSI's efforts are divided into three tracks: Conceptual, Research and Development (R&D), and Commercial. The three tracks come together in an ongoing formulation as a MultiCoRelational Science [Inquiry, Inference and Intuition]. The derived technology, products and services generated are in the aggregate referred to as SmartR Technology, are ideal for Knowledge Development, and will be deployed via a Knowledge Access Framework branded as ThoughtEnActment (TEA) and key to the following:

THE APP:

The present proposal is to build a Citizen Science implementation of this Relational Science as the proposed *weather center citizen science app.* The starting point is an intelligent software system in continuing active critical use developed by an engineering partner of TSI and renamed (MAT – Model for Augmenting Thinking) for re-purposing as the precedent for building a Relational Citizen Science tool kit. Using these existent software tools to create, develop, test, analyze, validate and apply scientific theories and models formed from real-world data, we have the operational core of the app including:

- MAT enables scientists to visualize and explore data, develop causal models, and validate those models against available data
- MAT is natural and intuitive to use, even for users without mathematical or computational training
- MAT uses data mining and machine learning (in KNOWLEDGE DEVELOPMENT) to recommend improvements to user-defined models
- MAT is independent of any specific computational modeling framework

Addendum to the World Weather Center, Weather Citizen Scientist[™] App Application to the Niagara River Greenway ("NRG") Commission for Funding

In an effort to broaden the initial App application into more of a "general program" to provide, through "Proof of Concept", to the Niagara River Greenway Commission and the visitors, tourists, guests and collaborative partners a source of data, information, collaborations, and relationships developed from the use of smart, synthetic intelligence, the World Weather Center proposes to conduct the creation of the App. into a "Citizen Scientist" program with two focuses.

The Proof of Concept Citizen Scientist program will be created, with the intent of launching two verticals, each with similar goals consistent with the Goals and Mission of the NRG as well as expanding the collective information desired to be studied by the World Weather Center. The Citizen Scientist App will have two, linked options; the Tourist Citizen Scientist and the World Weather Center, Weather Citizen Scientist[™] option. Each option, under a single App, will provide the Applicant and user with information consistent with the Mission, Goals, Values of the NRG and the WWC initial submission.

TECHNOLOGY BACKGROUND:

ThoughtSigns, Inc. ("TSI") is the developer of the *AutoGnome (AG)*, a unique and novel class of intelligent technology derived from a formal theory of mind equally applicable to both *personal* and *collective* intelligence.

TSI's mission is to facilitate human prosperity through AutoGnomic amplified intelligence/knowledge conditioned by its Truth with Relevance and Value (Goodness) being positive for all Humanity. In order to manage this mission, TSI's efforts are focused on developing a <u>Generalized Relational formulation of a</u> <u>CITIZEN SCIENCE APP.</u>

Operationally, TSI is partnering with Intelligent Software (AI) developers to build from existing AI-apps by formal extension into AG interpreted-Apps. TSI's prime partner in this effort is Charles River Analytics (CRA) as was submitted to the NRG in its initial submission.

CITIZEN SCIENCE APP (Cit-Sci_APP) Citizen Science, in the broadest sense of the term, (rather than more constrained roles such as only data collection) is democratization of all aspects of inquiry. Engaging non-specialists such as tourists, regional residents and visitors, in inquiry not only applies the diversity, knowledge and sheer quantity of effort available in the broader community, but also creates deeper understanding in citizens as stakeholders. For example, better understanding of environmental phenomena could lead to earlier and more effective collective decisions and political will to protect the environment. Similarly Videira documents the use of collective causal modeling to understand *degrowth* in a community as a path toward environmentally and socially sustainable futures (Videira et al. 2014). However, collective inquiry need not be applied to "serious" matters only, as it also already has its place in more recreational collective activities and hobbies.

Charles River Analytics' (CRA), technology Partner of TSI, collectively the "Contractor" to WWC, Model Analyst's Toolkit (MAT) was designed to be learned and used easily by non-specialists in creating, analyzing, and validating scientific theories and models using real-world data. It provides a highly integrated suite of modeling tools, from model graphing to data ingest and mining, as well as automated causal inference and machine learning algorithms.

Referring to the Niagara River Greenway Plan, the proposed project will advance the Niagara River Greenway vision including the goals, principles, and criteria that define that vision.

The WWC Citizen Scientist App will promote the **Vision** of the Niagara River Greenway by supporting a discovery process involving thousands of people communicating on tourism and tourism issues, along with the impact and effect of weather on all aspects of life, environment, and sustainability within the Greenway Corridor. The WWC is designed to be a world class destination utilizing world class technology, such as our Citizen Scientist App. Recognizing that the Niagara River Greenway is a corridor of many different natural and man- made experiences including our rivers, streams, canals, parks, and landscapes, the Citizen Scientists through our App, will be able to share and interpret tourism and tourism related issues and the impact of weather. We will not only discover the impact of weather in the Corridor, but celebrate tourism and what we have and how we may be able to sustain it. The Citizen Scientist App incorporates all of the Principals, Goals, and Criteria set forth by the Niagara River Greenway, and the Project will support by its very nature an accessible, unified, environmentally friendly process promoting the understanding of tourism and the weather impact on and in the Corridor. **Public Participation**

The World Weather Center Citizen Scientist App is the ultimate process of engaging the public to participate in a collective way to discover the impact of tourism and weather in the Corridor. As each Citizen Scientist uses the App., more and more people become engaged in the process of communication with each other forming Collective Intelligence.

The World Weather Center Citizen Scientist App will meet the Principles of the Niagara River Greenway by:

Excellence- The WWC and its App are committed to the development of world class experiences necessary to fully engage our customers and App users in discovering understanding tourism and weather and its impact on our environment. To achieve this excellence, we have identified world class concept, design, and technology partners such as ThoughtSigns, Inc. and Charles River Analytics to develop our App.

Sustainability- The WWC will promote the operation and maintenance of the App. This will lead to the sustainability of the Corridor as valuable knowledge is gained through a collective intelligence process on the impact of tourism and the weather.

Accessibility-The WWC App is the ultimate way to engage all people via a friendly, electronic process of discovering the Corridor's tourism characteristics and the weather's impact on the Corridor. Aside from the anticipated tools that the Citizen Scientist might use (smartphone, tablet, P.C.), the App will be able to be used by people who are of a different culture who may also speak and read languages other than English.

Ecological Integrity-The WWC App promotes the observation and discussion of the weather's impact on many aspects of living things and the environment. As such, we will be able to quantify events caused or impacted by the weather and continue to monitor the experience. Likewise, regarding tourism, the App will better define opportunities, interactions, and "situational roadblocks" affecting the tourist experience.

Public Well-being-The WWC App promotes the investigation by our Citizen Scientists into those tourist experiences and events caused by the weather. This will bring about a sense of public well-being. The Citizen Scientist will be in a position to report changes affecting the tourist experience and those events caused by the weather to the environment and be literally, "on the front line" in the know.

Connectivity-The WWC App will connect thousands of Citizen Scientist's throughout the Corridor in ways that have yet to be either suggested or achieved. MultiCoRelationships will be developed creating "Collective Intelligence" on Tourism and Weather related changes within the Corridor.

Restoration-The WWC app will promote the restoration of weather related change in the environment of the Corridor by first, recognizing that an event has happened (sighted by a Weather Citizen Scientist[™]), shared with other Citizen Scientists, and eventually discussed for potential restoration or remediation and where the Tourism link is utilized, promote the understanding of tourist experiences and improvements where necessary.

Authenticity-The WWC App will support the action of "participation" in a higher sense of personal and collective responsibility that reflects the traditional spirit and heritage of the area.

Celebration-The WWC app will be designed to celebrate what the elements of the Corridor are as to what was here, what is happening now as a result of the weather and tourism experiences, and how we can protect in the future our local history, cultural resources, and environment. The MultiCoRelational experiences and sharing of information will only strengthen the knowledge of not only the Citizen Scientists, but those people and institutions that follow the information through published reports.

Partnerships-The WWC App focuses on the Tourist experience and the impact of Weather in the Corridor. Fortunately, the information discussed by thousands of Citizen Scientists using the App will result in multiple levels of Partnerships. The Collective Intelligence will lead to, as a result of the App, the sharing of information resulting in local, regional, national, and bi-national Partnerships. This would include both public governmental entities and private entities.

Community Based-The WWC, and the proposed App, have the support of many political and private organizations in Niagara and Erie County. The information on the impact of Weather, historical and

potential, within the Corridor will allow the public sector to plan accordingly, improve budget allocations, and offer both remedies and prevention of future weather related events. Likewise, the introduction of an App focused on Tourism will provide vital information to the tourist and analysis by the Community stakeholders.

The World Weather Center Citizen Scientist App will meet the Goals of the Niagara River Greenway Commission by:

Improve Access-Whether our Citizen Scientist is a casual visitor or recreational participant in the Corridor, or lives or works within the Corridor, they will have the opportunity of participating in developing information and knowledge on the impact of the weather and the Tourist experience. Curiosity will also drive many new people to the Corridor to discover what, if any, event can be documented that is weather or tourist related. With the increase of people, current and new, improved access points will be expanded by the communities.

Make Connections-As a result of the proposed WWC App, residents, tourists, visitors, and workers will find themselves developing relationships with other Citizen Scientists, along with the Corridor stakeholders. Connections will be made because of common interests in discussing, reporting, and gaining knowledge on the weather and tourist impact in the Corridor.

Protect and Restore Environmental Systems-The WWC App will ensure that many Citizen Scientists are engaged in discovering, learning, and discussing the impact of the weather and tourism within the Corridor. The use of the App will add to other efforts within the region to protect and continue the wellbeing of the environment and tourist opportunities.

Celebrate History and Heritage-The WWC App users will be able to review the history of the impact of the weather and tourism on all of the elements of life and environment within the Corridor. This celebration of history will be able to examine hundreds of years of weather and tourism impact in such areas as: agriculture, the economy, health, seasonal and non-seasonal tourism trends, energy, transportation (especially river and lake travel), and the heritage of the various cultures, indigenous and non-indigenous populations.

Spark Revitalization and Renewal-The WWC App will promote greater Corridor access and curiosity by the citizen scientist into the weather and tourism impact-both positive and negative. As such, accurate identification of what is happening in the Corridor is important which will result, based on the nature of people, the need to revitalize what is in need and renew what needs help. The Collective Intelligence of thousands of users provides the communication necessary to really "know" what the weather and tourism is contributing to.

Promote Long Term Sustainability-The WWC App is one of many tools that can promote Long Term Sustainability. Communication between Citizen Scientists growing in numbers, sharing of information and knowledge, will ensure a continued, updatable bank of information on tourism and the weather's impact in the Corridor. The WWC looks to the App as a continued, educational and scientific tool to engage the users in a way to compliment the activities within the WWC. The WWC is committed to its long term viability and activity.

Extend Olmsted's Legacy-The WWC App will contribute to the extension of the Olmsted's Legacy. Olmsted "envisioned a necklace of parks and open spaces along the length of the River from Front Park in the City of Buffalo and stretching north of the Falls." Historically, the region was affected by commercial and industrial development, and remarkably, affected by more recent weather events such as the Blizzard of 1977, the Falls Freezing over, the hurricane of the early 1950's, the flooding of the Lake Ontario shoreline. As tourism has grown, the creation of Citizen Scientists and the corresponding App, gives the Corridor a much larger group of people to provide "Collective Intelligence" that can assist in the extension Olmsted's Legacy by identifying tourist and weather impact, quantify it, plan for remediation where necessary, and where necessary, promote an intervention in advance of further events.

The World Weather Center Citizen Scientist App will meet the Criteria of the Niagara River Greenway Commission by:

Consistency with Principles-The WWC App will make a major contribution allowing for the Principles of the Niagara River Greenway Plan to be maintained by observation, discussion, categorizing, and maintaining a bank of information relating to how weather and tourism are impacting the Corridor. Tourism and weather have a tendency to impact many aspects of life, including the environment, quality of life, and its sustainability. The ongoing, continuous study of the tourism and weather impact will aid the maintenance of the consistency of Principles outlined by the Niagara River Greenway Commission. **Priority Status**-The WWC App will be coming to fruition at a time when the impacts of increased weather events are being seen and felt much more frequently. Climate change is happening and we need to engage our citizens to become Citizen Scientists to gain more information on the impact of the weather. In addition, the impact of tourism in an area may have consequences on an annual basis that needs to be better understood as to the immediacy of planning and investment.

Focus Area-"The boundaries of the Greenway have been mapped along municipal boundaries." The WWC App will initially focus on the tourist regions along the Niagara River so that we can engage the Citizen Scientist who may be a tourist, resident, worker, or someone just enjoying a recreational experience such as boating, to observe, record, and start a relationship with someone of like mind and interest related to the weather and tourism.

Environmental Soundness-The environmental quality of the region is critical in maintaining and improving our quality of life. The WWC App will provide a unique, creative approach to engage the Citizen Scientist to record, analyze, and report the weather's negative impact on the environment and in some cases, through Collective Intelligence, recommend changes to mitigate the situation from repeating itself. Likewise, the Citizen Scientist will be able to query, record, analyze, and report tourist related experiences that may have a negative impact in the Corridor.

Implementable-The WWC App will be created through the efforts of the Partnership of the Charles River Analytics company (https://www.cra.com) and ThoughtSigns, Inc. (*https://www.linkedin.com/in/jon-ray- hamann-75410b410*) Collectively, the Partnership is the Contractor. They will be assisted by the WWC. The Sources and Use Chart within, defines the cost to produce the App. Charles River Analytics has already spent approximately \$1,000,000 to create the proprietary IP that will serve as the foundation platform for the App.

Economic Viability-The WWC will provide all maintenance, upkeep, and administration of the App. The WWC is requesting, as part of the Niagara River Greenway Commission Application, 2 years of funding to help with the initial years costs of the maintenance, upkeep, and administration.

Availability of Local Sponsor or Partner-The WWC is committed to developing and maintaining the Citizen Scientist App as part of its annual budget and will assume the long-term responsibility for continued operation and maintenance. The App is a very important element of the WWC and it mission; therefore, continued operation and marketing is a component of its strategic plan.

Ability to Match or Leverage Funds-The WWC will not be able to provide matching funds during the initial years; however, as more Citizen Scientists use the App beyond the Free use levels, revenue will be generated to assist in the operations of the App. Furthermore, it is anticipated that the WWC multimillion dollar destination, housing the App, will demonstrate the leveraging of the Niagara River Greenway Commission funding.

Consideration of Other Planning Efforts-The WWC App will generate knowledge that will enhance the information and knowledge on the impact of tourism and the weather in and adjacent to the Corridor needed by the Local Waterfront Revitalization Programs and other municipal comprehensive plans. The WWC will work with these organizations by sharing the information gained by our CI.

Clear Benefits-The WWC believes that the Citizen Scientist App provides a clear, innovative, creative tool and process to generate collective intelligence, by the thousands of users, about the weather's impact in the Corridor and the tourist experience in the Corridor. As important, is the sharing of information with the various stakeholders allowing for much better, more quantitative, valuable collection of event data and experience.

3. Define the budget for the proposed project and include costs:

Uses of Funding

* Planning, Existing IP Program Developed (CRA)	\$1,000,000
** Construction of Citizen Scientist App	\$ 275 <i>,</i> 000
Marketing of App	\$ 30,000
Scalable Controlling Hardware for App	\$ 20,000
Interactive Website/App Work	\$ 10,000
Administration	\$ 31,000
Maintenance, Upkeep / 2 Years	\$ 10,000
TOTAL PROJECT COST	\$1,376,000

* Charles River Analytics ("CRA"), Inc., Cambridge, Ma.

** Partnership between ThoughtSigns, Inc. and CRA Inc. collectively, "Contractor"

Sources of Funding

CRA Existing IP Program Software	\$1,000,000
Niagara River Greenway Commission	\$ 376,000
Total Project Sources	\$1,376,000

Identify all sources of funding and the amount of funding expected from each source. Identify and quantify funds that are already on hand or have been allocated for the proposed project. Explain how the project will be operated and maintained.

Currently, there are no funds to develop, purchase equipment, construct the App, including links, and launch the App, including the Marketing. The Project will be conducted by the Partnership of ThoughtSigns Inc. (*https://www.linkedin.com/in/jon-ray-hamann-75410b410*) and the Charles River Analytics company (https://www.cra.com). Collectively, the Partnership is the Contractor. The Marketing allocation from the Commission will pay for the regional, domestic, and international effort to have the App found, both on our website and links from other sources. The App will be managed by Staff of the World Weather Center.