

Anthony J. Giarrusso
Senior Research Scientist
Associate Director
Center for Urban Resilience and Analytics (CURA)
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EDUCATIONAL BACKGROUND:

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Field</i>
MCP	2000	Georgia Institute of Technology	City Planning, GIS
BS	1992	Georgia State University	Biology, Chemistry

EMPLOYMENT HISTORY:

<i>Title</i>	<i>Organization</i>	<i>Years</i>
Senior Research Scientist	GT – CSPAV/CURA	2013 - present
Associate Director	GT – CGIS/CSPAV/CURA	2010 - present
Research Scientist II	GT – Center for GIS	2003-2012
Instructor (Intro to GIS)	GT – School of CRP	2003 - present
Research Scientist I	GT – Center for GIS	2000 - 2004
Graduate Research Assistant	GT– Center for GIS	1998 - 2000
Fisheries Extension Agent	U.S. Peace Corps (Africa)	1993 - 1998

CURRENT FIELDS OF EXPERTISE:

Mr. Giarrusso’s novel use of GIS applications as decision-support tools to inform planning, policy, and practice led to developing secondary expertise in the following areas: coastal and marine spatial planning, biofuels and renewable energy, GIS education, parks and recreation planning, public health, natural resource management, land cover classification, and general GIS-based planning support.

I. MASTERY OF A COMPLEX FIELD

A. Publications, Presentations, Posters

1. Published Journal Papers (refereed)

- 1.1 Alice Favero, Matthew Realff, Maria Lucas, **Anthony Giarrusso**, and Karl Lang (2023), Geo-Spatial Economic Assessment of the Potential Development of Bioenergy Combined with Direct Air Carbon Capture (BEDAC) in the USA. *Environmental Science & Technology* 2023 57 (51), 21681-21690
<https://pubs.acs.org/doi/10.1021/acs.est.3c06975>
- 1.2 Evans, Kathryn A.; **Giarrusso, Anthony J.**; and Zaparanick, David (2023), Perpetual Protection for Atlanta's High-Quality Forested Land in the City, *Cities and the Environment (CATE)*: Vol. 13: Iss. 1, Article 29.
- 1.3 Fahr, S., Powell, J., Favero, A., **Giarrusso, A.J.**, Lively, R.P. and Realff, M.J. (2022), Assessing the physical potential capacity of direct air capture with integrated supply of low-carbon energy sources. *Greenhouse Gas Sci Technol*, 12: 170-188.
<https://doi.org/10.1002/ghg.2136>
- 1.4 Portela G.T., Leong T., Webster A., **Giarrusso A.J.**, **Fridkin S.**, **Ray S.**, **Swerdlow D.**, **Immergluck L.** Risk factors for non-invasive (skin and soft tissue) and invasive *Staphylococcus aureus* infections among children and adults living in southeastern USA: a retrospective cohort study *BMJ*
<https://bmjopen.bmj.com/content/12/8/e059327.info>
- 1.5 Caillaud, D., Ndagijimana, F., **Giarrusso, A.J.**, Vecellio, V. and Stoinski, T.S. (2014), Mountain gorilla ranging patterns: Influence of group size and group dynamics. *Am. J. Primatology.*, 76: 730-746. <https://doi.org/10.1002/ajp.22265>
- 1.6 Matthew D. Falb, MHS, Dafna Kanny, PhD, Kenneth E. Powell, MD, **Anthony J. Giarrusso**, MCP, 2007, "Estimating the Proportion of Children Who Can Walk to School" in *The American Journal of Preventive Medicine*, Vol. 33(4), pp. 269-275.

2. Published Papers (non-refereed)

- 2.1 Giarrusso, Anthony "Combating Urban Sprawl", Environmental Systems Research Institute, *ArcUser*, Winter 2003

3. Invited Conference Presentations

- 3.1 Giarrusso, Anthony. Georgia Coastal and Marine Planning (): A Policy and Mapping Initiative, Georgia Climate Conference 2021, Tools Showcase August 2021. Jekyll Island, GA
- 3.2 Johnson, Nick. Giarrusso, Anthony. Georgia Now and Forever Land Cover, Georgia Climate Conference 2021, August 2021. Jekyll Island, GA

- 3.3 Giarrusso, Anthony. Georgia Wetlands Restoration Access Portal, Georgia Climate Conference 2021, August 2021. Jekyll Island, GA
- 3.4 Giarrusso, Anthony. Georgia Coastal and Marine Planning (GCAMP): A Policy and Mapping Initiative, ESRI's Ocean, Weather and Climate Forum, Virtual, November 5, 2020 – **Technical Keynote**
- 3.5 Giarrusso, Anthony. Georgia Coastal and Marine Planning (GCAMP): A Policy and Mapping Initiative, Ocean Visions 2019, Georgia Tech, April 1-4, 2019 – **Plenary Speaker**
- 3.6 Giarrusso, A.J., "Atlanta's Changing Tree Canopy," 2018, CDC Healthy Places Conference, Atlanta, GA October 16th, 2018
- 3.7 Giarrusso, Anthony. Georgia Wetlands Toolkit; Maximizing Use of Georgia Wetlands Data. Annual Meeting of the Society of Wetlands Scientist. Providence, RI. 6/1/15 – 6/4/15
- 3.8 Belknap, Jordan; Foster, Caroline and Giarrusso, Anthony; Data Science for Social Good Tree Project. Georgia Urban Forestry University Conference. Agnes Scott College, Decatur, Ga. 9/22/15
- 3.9 Giarrusso, A. and Smith, S., "Assessing Urban Tree Cover: A Baseline Canopy Study for the City of Atlanta," Georgia Urban Forestry Conference, Athens, GA, October 2014
- 3.10 Giarrusso, A., Tracking Mountain Gorillas in Rwanda, Gorilla DB Research Symposium, July 2012, Karisoke Research Center, Musanze, Rwanda
- 3.11 Giarrusso, A., Building the Regional Information Management System (IMS) for the Governors' South Atlantic Alliance, NOAA Regional Data Management and Portal Workshop, June 2012, Charleston, South Carolina.

4. Conference Presentations without Proceedings

- 4.1 Giarrusso, Anthony. Georgia Wetlands Restoration Access Portal, Coastal GeoTools, Myrtle Beach, SC. February 11-14, 2019
- 4.2 Giarrusso, Anthony, Guhathakurta, Subhrajit. Atlanta City Design, Georgia Planning Association, Athens, GA. October 4, 2019
- 4.3 Giarrusso, A.J., "Atlanta's Changing Tree Canopy," GPA Conference, Jekyll Island, GA. September 7, 2018
- 4.4 Giarrusso, A.J., "Georgia Coastal and Marine Planner," Coastal Geotools, Charleston, South Carolina, February 10, 2017.
- 4.5 Giarrusso, Anthony. Georgia Wetlands Toolkit; Maximizing Use of Georgia Wetlands Data. Coastal GeoTools. Charleston, SC. 3/30/15 – 4/2/15
- 4.6 Emmert, Sonny and Giarrusso, Anthony. Planning for Offshore Georgia; the Georgia Coastal and Marine Planner. Coastal GeoTools. Charleston, SC. 3/30/15 – 4/2/15
- 4.7 Bacon, K. and Giarrusso, A., "Measuring the Success of the Atlanta Streetcar,"

- Railvolution, Minneapolis, MN, September 2014
- 4.8 Emmert, S. and Giarrusso, A., “Georgia Coastal and Marine Planner: An Interactive Tool for Offshore Planning,” Georgia Geospatial Conference, Athens, GA, October 2014
 - 4.9 Giarrusso, A., “Assessing Urban Tree Cover: A Baseline Canopy Study for the City of Atlanta,” Georgia Geospatial Conference, Athens, GA, October 2014
 - 4.10 Giarrusso, A., “Georgia Wetlands Toolkit,” Georgia Geospatial Conference, Athens, GA, October 2014
 - 4.11 Giarrusso, A., Hallisey-Hunt, Mary, DOUNGCHAI, Lisa, Georgia Offshore Marine Mapping and Planning, American Wind Energy Association Annual Conference, 2009, Dallas, TX. Mr. Giarrusso presented- Co-created presentation.
 - 4.12 Giarrusso, A., Walking to School in Georgia; A GIS-based analysis, Georgia Dept. of Transportation 1st Annual Bicycle and Pedestrian Conference, 2007, Atlanta, Georgia Mr. Giarrusso was full author and presenter.

B. Key Delivered Products

1. GA Historic and Projected Landcover Database

Sponsor: Georgia Conservancy

Performance Period: 2020-2022

Web link: <https://arcg.is/11bTag>

Description: Mr. Giarrusso created a historic (1974-2020) and projected (2030 and 2060) landcover database for Georgia at several geographic scales (state, county, watersheds, USGS quadrangle). In addition to the database, several interactive data dashboards were also created and can be viewed using the above link. The results can be viewed at. This database and dashboards provide the GA Conservancy with information on the history of land use in Georgia and its projected effects in the future., which they are using to educate state and local governments on their land use. See article below on how this information informed the Georgia Farmland Conservation Act in 2023. <https://www.gpb.org/news/2023/03/08/bipartisan-farmland-conservation-bill-passes-georgia-senate-on-crossover-day>

2. Thrive Regional Infrastructure Portal (TRIP)

Sponsor: Thrive Regional Partnership

Performance Period: 2021-2023

Web Link: <https://trip-thrive-geohub.hub.arcgis.com/>

Description: Mr. Giarrusso created the Thrive Regional Infrastructure Portal, a publicly available suite of geospatial data, maps, dashboards and resources related to freight, transportation and infrastructure in the tri-state Chattanooga region. Thrive uses this portal to engage stakeholders in

transportation and freight planning for the region.

3. Environmental Quality Report Widget for Developments of Regional Impact

Sponsor: Georgia Department of Natural Resources Coastal Resource Division

Performance Period: 2020-2022

Description: Mr. Giarrusso created an environmental impact assessment reporting tool that allows users to interact with a map and return a detailed environmental report for a user-selected area. This tool helps GA DNR staff members quickly evaluate developments of regional impacts by supplying them with detailed statistics and information for specific areas along the Georgia coast. This tool saves DNR staff members enormous amounts of time and resources. Without this tool, data compilation for a given area would take several hours.

4. Summary Tool Widget for GCAMP

Sponsor: Georgia Department of Natural Resources Coastal Resource Division

Performance Period: 2021

Weblink: <https://geospatial.gatech.edu/GCAMPApp/>

Description: Mr. Giarrusso created a summary report tool that allows users to interact with a map and return a detailed summary report for a user-selected area of offshore Georgia. This tool helps users quickly evaluate an offshore area for its development potential by supplying them with detailed information about their selected area, a task that would otherwise take hours of work.

5. Summary Tool Widget for G-WRAP

Sponsor: Georgia Department of Natural Resources Coastal Resource Division

Performance Period: 2021

Weblink: <https://geospatial.gatech.edu/GCAMPApp/>

Description: Mr. Giarrusso created a summary report tool that allows users to interact with the official wetlands map of coastal Georgia and return a detailed summary report for a user-selected area. This tool helps users and DNR staff members quickly evaluate an area for its wetlands impact, land cover, and environmental importance by supplying them with detailed information in tabular and graphic form about their selected area. Similar to the tools listed above, this tool saves DNR staff members enormous amounts of time and resources. Without this tool, data compilation for a given area would take several hours.

6. Tree Canopy Geospatial Portal for the City of Atlanta

Sponsor: City of Atlanta

Performance Period: 2012-2022

Web link: <https://geospatial.gatech.edu/AtlantaUTC/>

Description: Mr. Giarrusso has conducted three tree canopy assessments and change analyses for the City of Atlanta over the last 11 years. This portal contains interactive maps, data dashboards and ESRI StoryMaps summarizing the project findings. These efforts have been well received by the city and have resulted in city council passing resolutions to protect at least 50% of tree canopy in the city and to perform canopy assessment updates at five-year intervals.

7. City of Atlanta Digital Model and Growth Scenarios

Sponsor: City of Atlanta

Performance Period: 2017-2019

Web link: <https://geospatial.gatech.edu/AtlantaCityDesign/>

Description: This collaboration between the City of Atlanta and Georgia Tech was borne out of desire for novel planning tools that facilitate the urban design process. The result of this partnership is a set of interactive applications that extend the utility of geospatial data and incorporate advanced modeling techniques – allowing for dynamic visualization of build-out scenarios in a browser-based 3D environment.

8. Georgia Wetlands Restoration Portal (G-WRAP)

Sponsor: Georgia Department of Natural Resources Coastal Resource Division

Performance Period: 2014 – present

Web link: <https://geospatial.gatech.edu/G-WRAP/>

Description: In 2014, Mr. Giarrusso created the Georgia Wetlands Restoration Access Portal (G-WRAP), a geospatial gateway to interactive wetlands maps, data, and resources for coastal Georgia. Used primarily by Ga DNR wetland biologists, G-WRAP is a resource for presenting, storing, analyzing, and visualizing wetlands data for the Georgia coast. Mr. Giarrusso reviews, evaluates, and updates the portal annually for GA DNR.

9. The Georgia Wetlands Toolkit

Sponsor(s): Georgia Department of Natural Resources Coastal Resources Division and NOAA

Performance Period: 2013-2014

Web link: <https://geospatial.gatech.edu/WetlandsToolkit/>

Description: The Georgia Wetlands Toolkit is an ESRI Add-in or software extension that provides users with tools and resources to better understand and analyze national wetland inventory geospatial data.

10. The Georgia Coastal and Marine Planner (GCAMP)

Sponsor(s): Georgia Department of Natural Resources Coastal Resources Division and NOAA

Performance Period: 2010 – present

Web link: <https://geospatial.gatech.edu/GCAMP/>

Description: A recommendation set forth in Georgia's 2010 evaluation of their

Coastal Zone Management Plan was the establishment of a geospatial resource hub designed for coastal and marine planning. Mr. Giarrusso was contracted to create this resource for Georgia, which is widely used by DNR staff and developers when looking for offshore sites for development. He reviews, evaluates, and updates the portal annually for GA DNR.

11. Mountain Gorilla Ranging and Conservation Tools

Sponsor: Smithgall Watts GT Bio

Performance Period: 2010-2020

Web Link: <https://geospatial.gatech.edu/Gorillas/Homepage/>

Description: Since 2010, Mr. Giarrusso has collaborated with the Dian Fossey Gorilla Fund International (DFGFI) through grants made by the GT Bio Smithgall/Watts fund, a joint research funding opportunity between GT researchers at Zoo Atlanta. Mr. Giarrusso has created interactive maps and geospatial databases of daily mountain gorilla movements in Volcanoes national park, Rwanda, Africa. Additionally, Mr. Giarrusso has conducted land cover change assessments and anti-poaching analysis for the same area. Several key products have been created as part of this collaboration, most of which can be viewed through the above link. The most recognized product was the creation of an interactive, 3D sandbox of the Virunga mountains, which was housed in the Dian Fossey Memorial Exhibit at Fossey HQ in Rwanda between 2017 – 2020. <https://biosciences.gatech.edu/news/virtual-sandbox-helps-plight-rwandan-mountain-gorillas-1>

12. Georgia Offshore Wind GIS Database and Portable Maps

Sponsor: Southeastern Alliance for Clean Energy

Performance Period: 2010

Description: spatial database of GIS datasets pertinent to offshore wind energy, ArcReader Portable Map Set (canned data and map viewer for novice GIS users).

13. Land Scan Tool

Sponsor: Chevron

Performance Period: 2009

Description: GIS Code and associated tool that scans land at set distances from a point and returns user-specified variables found in the scan area. Chevron used the tool to assess sites in the SE USA for biofuel potential.

14. Potential Biofuel Database and Multi-Modal Transportation Network

Sponsor: Chevron

Performance Period: 2009

Description: Mr. Giarrusso created a high-resolution, seven-state spatial database of potential biofuel resources and an associated multi-modal GIS transportation network. Both products were used by Chevron to assist with refinery site location.

15. City of Atlanta Park Accessibility Database

Sponsor: City of Atlanta

Performance Period: 2006 and 2014

Description: Mr. Giarrusso conducted a park accessibility analysis for the city of Atlanta in 2006 and updated in 2014. The results of the analysis were delivered as spatial databases to be used for park planning at the city.

16. GeoPDF Map Series

Sponsor: Atlanta Neighborhood Development Partnership

Performance Period: 2005

Description: Mr. Giarrusso created a GeoPDF map series showing potential greenspace and land prime for development in Metro Atlanta to be used by ANDP and their partners to promote environmentally sustainable economic development in targeted areas.

17. Fort Benning and Fort Stewart Military Encroachment GIS Databases

Sponsor: The Nature Conservancy and Trust for Public Land

Performance Period:2004,2005,2006

Description: spatial databases with relevant GIS data for base encroachment. GIS database contains results of any analysis performed by Mr. Giarrusso. Data is used by sponsor to help make decisions regarding base encroachment.

18. Childcare Map Series

Sponsor: Arthur. M. Blank Family Foundation

Performance Period:2008

Description: Digital maps and data (Spreadsheets) produced for Prevent Child Abuse (PCA) Georgia showing location of day cares, families on daycare wait lists, and PCA resources across the state. Maps used in PCA 2009 Annual Report

19. Fort Benning and Fort Stewart Military Encroachment GIS Databases

Sponsor: The Nature Conservancy and Trust for Public Land

Performance Period:,2004,2005,2006

Description: spatial databases with relevant GIS data for base encroachment. GIS database contains results of any analysis performed by Mr. Giarrusso. Data is used by sponsor to help make decisions regarding base encroachment.

20. Chattahoochee Hill Country Greenspace Support System

Sponsor: Fulton County and Chattahoochee Hill Country Alliance (CHCA)

Performance Period:2006

Description: Spatial database of project data and results, tools to retrieve the data, associated documentation and user guides. Product currently being used by CHCA for planning

21. Greenspace Acquisition Support System

Sponsor: Trees Atlanta

Performance Period:2002, 2005

Description: Spatial database of project data and results, tools to retrieve the data, associated documentation and user guides. Product currently being used by Trees Atlanta and the City of Atlanta for planning.

22. Software Extensions - ArcView 3x and 8x GIS Extension

Sponsor: State of Georgia

Performance Period:2002-2003

Description: customized software extension written in Avenue and Visual Basic for Applications for ArcVIEW 3x and ArcMap 8x that allows users to better understand and analyze Georgia wetland data. User guides and documentation also created. Application met with much praise for its ingenuity and applicability.

23. Software - HTML Based Interactive Mapper

Sponsor: Trees Atlanta

Performance Period:2005

Description: HTML based tool, interactive mapper created to allow sponsor to easily view project results without having to use GIS. Application met with much success due to its ease of use.

24. Environmental Initiative Map Books and Internet Map Sites

Sponsor: The Arthur M. Blank Family Foundation

Performance Period: 2002 - 2005

Description: To assist AMBFF members evaluate land, Mr. Giarrusso created an online mapping site with property maps and various statistics. He also created hardcopy map books for the less technically inclined.

25. Redesigned Georgia NWI Wetlands Database

Sponsor: State of Georgia Performance Period:2002

Description: All Georgia NWI data (> 100gb) processed and converted to new format based on Mr. Giarrusso's database redesign. Data and database dictionary documentation created by Mr. Giarrusso.

26. Georgia DOQQs

Sponsor: State of Georgia

Performance Period:1999-2001

Description; Mr. Giarrusso was part of team responsible for scanning and rectifying color infrared digital orthophotos for the state of Georgia. Mr. Giarrusso's task includes project flow design, georeferencing over 500 images (1400 total for state), project documentation, leader of qa/qc tasks, and data storage.

C. Research/Teaching Recognition Awards

1. College of Design Nominee for Teacher of the Year 2023
2. GT "Honor Roll" for Teaching, Spring 2023
3. College of Design Researcher of the Year 2019
4. CTL Teacher of the Year Recognition - 2017

II. Technical Contributions and Innovation

A. Research reports

1. Giarrusso, A., "GCAMP and G-WRAP Annual Evaluations", Final reports on annual basis, GA DNR, 2015-Present, Author
2. Giarrusso, A., "Coastal Georgia 2009-2019 Tree Canopy Assessment, Change Detection, Outreach and Training – Year 1", Final Report, GA DNR, 2023, Author
3. Giarrusso, A. "Greater Chattanooga Freight Hub", Final Report, Thrive Regional Partnership, 2022, Author
4. Giarrusso, A. "Examining Georgia's Past; A Historic Look at Landcover Change in Georgia over the Last 50 years", Final Report, Georgia Conservancy, 2022, Author
5. Giarrusso, A. "City of Atlanta Urban Tree Canopy Assessment and Change Analysis 2008-2018", Final Report, City of Atlanta, 2021, Author
6. Giarrusso, A. "Georgia Now and Forever Data Methods", Final Report, Georgia Conservancy, 2021, Author
7. Giarrusso, A. and Zhang, G. "Environmental Widget for Developments of Regional Impact", Final Report, Georgia DNR, 2021, Author
8. Giarrusso, A., "Social Media Analysis for Transit Assessment", UT Arlington Transportation Research Center, Final Report, 2019, Co-Author.
9. Giarrusso, A., "Desktop Identification of Wetlands", Electric Power Research Institute, 2019, Final Report, Author
10. Giarrusso, A., "Land Cover Change around Volcanoes National Park", GT Bio Smithgall Watts, 2018, Final Report, Author
11. Giarrusso, A., "Tree Canopy Assessment and Change Analysis 2008-2014", City of Atlanta, Final Report, 2017
12. Giarrusso, A., Zhang, G., "Real-Time Flood Risk Modeling Using Social Media and Crowd-Sourced Data, Georgia Sea Grant, Final Report, Co-Author, 2017
13. Giarrusso, A., "Understanding Human Threats to Mountain Gorillas", GT Bio Smithgall Watts, 2016, Final Report, Author
14. Giarrusso, A., "Georgia Wetlands Restoration Portal", Georgia Department of Natural Resources, 2016, Final Report, Author
15. Giarrusso, A., "Gorilla Habitat Mapping", GT Bio Smithgall Watts, Fall 2015, Final Report, Author
16. Giarrusso, A., Hunt, Mary, "Georgia Coastal and Marine Planning Assessment", Georgia Department of Natural Resources, Final Report, 2015, Co-Author
17. Giarrusso, A., Sivakumar, R., "GIS-Based Fiscal Impact Model", DeKalb County, 2014, Final Report, Co-Author.
18. Giarrusso, A., "Tracking the Success of the Atlanta Streetcar", AREA Research Co, 2014, Final Report, Author.
19. Giarrusso, A., "Project Greenspace Plan Update", City of Atlanta, 2014, Final Report. Author.

20. Giarrusso, A., Smith, S., "Tree Canopy Baseline Study for the City of Atlanta", City of Atlanta, 2013, Final Report. Co-Author
21. Giarrusso, A.J., "Vegetation Mapping in the Volcanoes National Park", GT Bio Smithgall Watts, 2013, Final Report, Author
22. Giarrusso, A., Hunt, M., "Building the Regional Information Management to Support Coastal Planning", Final Report, 2013, Georgia Department of Natural Resources/NOAA. Co-Author.
23. Giarrusso, A., Hunt, M., Shelton, S., and Doungchai, V., "Georgia's Offshore Renewable Energy Potential: Spatial Mapping and Planning", Final Report, Southern Alliance for Clean Energy, 2010. Co-Author
24. Giarrusso, A., Realff, Matthew and Muthukumar, Subramanyam, "Evaluating Biomass and Feedstock Potential in the Southeastern United States", Final Report, ChevronTexaco, 2009. Author
25. Okwo, A., Borin, S., Luo, X., Giarrusso, A. and Thomas, V, "Biomass Feedstock Supply for the Southeast USA", Final Report, ChevronTexaco, 2009, Contributor
26. Giarrusso, A., "Examining MRSA and MSSA in Children using GIS", Final Report, Morehouse College, 2009, Author
27. Giarrusso, A., "Web-based Mapping of Childcare and Recreation Facilities", Final Report, Arthur Blank Family Foundation, 2009, Final Report, Author
28. Giarrusso, A. and Smith, S., "Alternatives to Coastal Development Guidebook", Final Report, GADNR, 2008, Co-Author
29. Giarrusso, A. and French, S., "Metropolitan Atlanta Land Supply", Final Report, Atlanta Neighborhood Development Partnership, 2007, Co-Author
30. Giarrusso, A., "Mapping the BeltLine", Final Report, Atlanta Development Authority, 2007, Author
31. Giarrusso, A., "Greenprinting in Cobb County" Final Report, Trust for Public Land, 2007, Author
32. Giarrusso, A., "Understanding Park Access in the City of Atlanta", Final Report, City of Atlanta, 2006, Author
33. Giarrusso, A., "Walking to School in Georgia", Final Report, Department of Human Resources, 2006, Author
34. Mumford, K and Giarrusso, A., "City of Atlanta Park and Recreation Initiative", Final Report, Emory-Arthur M. Blank Family Foundation, 2006, Contributor
35. Giarrusso, A., "Boys and Girls Clubs in Metro Atlanta; A GIS-based Study", Task Report, Arthur M. Blank Family Foundation, 2005, Author
36. Giarrusso, A., "Fort Benning Encroachment – Phase II", Final Report, The Nature Conservancy, 2005, Author
37. Giarrusso, A., "Military Base Encroachment at Fort Stewart", Final Report, Trust for Public Land, 2005, Author
38. Giarrusso, A., "Greenspace Support System for Chattahoochee Hill Country", Final Report, Fulton County and Chattahoochee Hill Country Alliance, 2004, Author
39. Giarrusso, A., "Potential Greenspace Information Map Book", Final Report, Arthur M. Blank Family Foundation, 2004, Author

- 40. Giarrusso, A., “Greenspace Acquisition Support System- Phase II”, Final Report, Trees Atlanta, 2003, Author
- 41. Giarrusso, A. and Mettile, T., “Wetlands Tool User Guide and Database Dictionary”, Final Report – User Guide, State of Georgia, 2001, Co-Author
- 42. Giarrusso, A., “Fort Benning Base Encroachment – Phase I”, Final Report, The Nature Conservancy, 2002, Author
- 43. Giarrusso, A., “Greenspace Acquisition Support System”, Final Report, Trees Atlanta, 2001, Author

B. Independent Research and Development Efforts, Seed Grants, Other Significant Technical Innovation

- 1. **Geospatial and Economic Assessment of the Potential Development of Bioenergy Combined with Direct Carbon Air Capture in the USA**
 Sponsor: Office of the Executive Vice President for Research (EVPR) Seed Grant
 Performance Period: 2021-2022
 Description: an economic and geospatial assessment of suitable US sites for bioenergy plants coupled with direct carbon air capture systems. This was a joint project between
- 2. **Biomass Resource Information and Routing System (BRIARS)**
 Sponsor: Strategic Energy Institute Creating Energy Options Seed Grant
 Performance Period: 2009
 Description: development of a Biomass Resource Information and Routing System (BRIARS), a web GIS-based site suitability tool designed to help identify significant biomass areas in Georgia. One of three recipients chosen from a pool of over fifty applicants.

III. PROJECT LEADERSHIP AND SUPERVISION

A. Leadership in Funded Research

1. Externally Sponsored Programs for which the Candidate Served in a Leadership Role

1	Title:	Global Centers Track 2: US-Africa Research Center for Clean Energy
	Contract Number:	GR00023937
	Sponsor:	NSF
	P.I.:	Valerie Thomas
	Candidate’s Role:	Co-Principal Investigator
	Budgetary Authority?	No
	Amount Funded for Task:	\$20,000

	Amount Funded for Project:	\$250,000
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2023-2025
	Period of Performance (Candidate)	2023-2025
	Contributions:	Data compilation, proposal and report writing, stakeholder engagement
2	Title:	State of Georgia Canopy Assessment and Change Analysis
	Contract Number:	Waiting on #
	Sponsor:	Georgia Forestry Commission
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$82,000
	Amount Funded for Project:	\$82,000
	Number and Rank of Persons Supervised:	undergraduate student
	Period of Performance (Project):	2024-2025
	Period of Performance (Candidate)	2024-2025
	Contributions:	PI responsible for all aspects of the project
3	Title:	DeKalb Canopy Assessment and Change Analysis
	Contract Number:	Waiting on #
	Sponsor:	DeKalb County
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$50,000
	Amount Funded for Project:	\$50,000
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2024-2025

	Period of Performance (Candidate)	2024-2025
	Contributions:	PI responsible for all aspects of the project
4	Title:	City of Atlanta Tree Canopy Assessment Phase IV
	Contract Number:	GR00025893
	Sponsor:	City of Atlanta
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$81,278
	Amount Funded for Project:	\$81,278
	Number and Rank of Persons Supervised:	Undergraduate student
	Period of Performance (Project):	2023-2024
	Period of Performance (Candidate)	2023-2024
	Contributions:	PI responsible for all aspects of the project
5	Title:	Coastal Georgia Tree Canopy Assessment, Change Analyses, Outreach and Training
	Contract Number:	GR00018642/43
	Sponsor:	Georgia DNR
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$198,000
	Amount Funded for Project:	\$198,000
	Number and Rank of Persons Supervised:	Graduate student, undergraduate student
	Period of Performance (Project):	2022-2024
	Period of Performance (Candidate)	2022-2024
	Contributions:	PI responsible for all aspects of the project
6	Title:	Thrive Regional Infrastructure Portal
	Contract Number:	GR00013397
	Sponsor:	Thrive Regional Partnership

	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$80,000
	Amount Funded for Project:	\$80,000
	Number and Rank of Persons Supervised:	1 RS II
	Period of Performance (Project):	2021-2023
	Period of Performance (Candidate)	2021-2023
	Contributions:	PI responsible for all aspects of the project
7	Title:	Atlanta Tree Canopy Assessment and Change Analysis Phase 3
	Contract Number:	GR00000449
	Sponsor:	City of Atlanta
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$103,000
	Amount Funded for Project:	\$103,000
	Number and Rank of Persons Supervised:	1 Graduate Student
	Period of Performance (Project):	2019-2022
	Period of Performance (Candidate)	2019-2022
	Contributions:	PI responsible for all aspects of the project
8	Title:	GCAMP and G-WRAP Survey and Portal Enhancements
	Contract Number:	GR000008401
	Sponsor:	Georgia DNR
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$80,000
	Amount Funded for Project:	\$80,000
	Number and Rank of Persons Supervised:	1 RS II

	Period of Performance (Project):	2020-2021
	Period of Performance (Candidate)	2020-2021
	Contributions:	proposal writing, data analysis, report writing, presentations, survey design and deployment, data compilation, tool design, widget implementation.
9	Title:	Examining Georgia's Past: A Historic Look at Land Cover Change Over the Last 50 Years in Georgia
	Contract Number:	GR00001971
	Sponsor:	Georgia Conservancy
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$40,000
	Amount Funded for Project:	\$40,000
	Number and Rank of Persons Supervised:	1 Graduate Student
	Period of Performance (Project):	2019-2022
	Period of Performance (Candidate)	2019-2022
	Contributions:	PI responsible for all aspects of the project
10	Title:	Environmental Quality Report Widget for Developments of Regional Impact
	Contract Number:	GR00009742
	Sponsor:	Georgia DNR
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$25,000
	Amount Funded for Project:	\$25,000
	Number and Rank of Persons Supervised:	1 research scientist
	Period of Performance (Project):	2021

	Period of Performance (Candidate)	2021
	Contributions:	report writing, data compilation and tool design.
11	Title:	Social Media for Transit Analysis
	Contract Number:	GR0000796
	Sponsor:	CTEDD
	P.I.:	Zhang
	Candidate's Role:	Co- Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$6,000
	Amount Funded for Project:	\$100,000
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2019-2020
	Period of Performance (Candidate)	2019-2020
	Contributions:	proposal and concept development, client relations, budgeting, report writing
12	Title:	Real Time Flood Risk Modeling Using Social Media
	Contract Number:	GR10002677
	Sponsor:	Georgia Sea Grant
	P.I.:	Zhang
	Candidate's Role:	Co- Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$32,000
	Amount Funded for Project:	\$100,000
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2019-2020
	Period of Performance (Candidate)	2019-2020
	Contributions:	proposal and concept development, client relations, budgeting, report writing
13	Title:	Desktop Identification of Wetlands

	Contract Number:	482660D
	Sponsor:	Electric Power Research Institute
	P.I.:	Giarrusso
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$64,000
	Amount Funded for Project:	\$64,000
	Number and Rank of Persons Supervised:	1 Graduate Student
	Period of Performance (Project):	2018-2019
	Period of Performance (Candidate)	2018 -2019
	Contributions:	Research, report writing, analysis, supervise student
14	Title:	City of Atlanta Digital Model and Growth Scenarios
	Contract Number:	4826697
	Sponsor:	City of Atlanta
	P.I.:	Guhathakurta
	Candidate's Role:	Co- Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$45,000
	Amount Funded for Project:	\$165,000
	Number and Rank of Persons Supervised:	1 Research Scientist II
		1 Graduate Student
	Period of Performance (Project):	2017-2018
	Period of Performance (Candidate)	2017-2018
	Contributions:	data creation and management, client relations, proposal, presentations
15	Title:	Summary Tools and Site Prioritization
	Contract Number:	4826805
	Sponsor:	Georgia DNR
	P.I.:	Zhang
	Candidate's Role:	Co- Principal Investigator
	Budgetary Authority?	Yes

	Amount Funded for Task:	\$5,000
	Amount Funded for Project:	\$15,000
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2017-2018
	Period of Performance (Candidate)	2017-2018
	Contributions:	proposal and concept development, client relations, budgeting, report writing
16	Title:	GCAMP and G-WRAP Annual Evaluations
	Contract Number:	4826695
	Sponsor:	Georgia DNR
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$ 13,000 Annual
	Amount Funded for Project:	\$ 13,000 Annual
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2016 - present
	Period of Performance (Candidate)	2015- present
	Contributions:	PI responsible for all aspects of the project
17	Title:	Atlanta Tree Canopy Assessment Phase 2
	Contract Number:	4826656
	Sponsor:	City of Atlanta
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$98,168.00
	Amount Funded for Project:	\$98,168.00
	Number and Rank of Persons Supervised:	1 Research Scientist II
		1 Graduate Student, 1 Undergraduate Student
	Period of Performance (Project):	2015 - 2017

	Period of Performance (Candidate)	2015-2017
	Contributions:	PI responsible for all aspects of the project
18	Title:	Project Greenspace Plan Update
	Contract Number:	4826662
	Sponsor:	City of Atlanta
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	\$19,815.00
	Amount Funded for Project:	\$19,815.00
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	1/2014 – 1/2015
	Period of Performance (Candidate)	Jan 2014 – Jan 2015
	Contributions:	Mr Giarrusso is responsible for all aspects of the project. The project focus is using GIS to help understand park access
19	Title:	Tracking the Success of the Atlanta Streetcar
	Contract Number:	4826804
	Sponsor:	AREA Research CO
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	\$44, 313.46
	Amount Funded for Project:	\$44, 313.46
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	Jan 2014 – Jan 2015
	Period of Performance (Candidate)	Jan 2014 – Jan 2015

	Contributions:	Mr. Giarrusso is responsible for creating an interactive map and multi-media visualization tools that display various metrics the project team is tracking and compiling to measure the benefits of the streetcar
20	Title:	GIS Based Fiscal Impact Model
	Contract Number:	4826666
	Sponsor:	DeKalb County
	P.I.:	Rama Sivakumar
	Candidate's Role:	Co-PI
	Budgetary Authority?	YES
	Amount Funded for Task:	\$50,000.00
	Amount Funded for Project:	\$100,000
	Number and Rank of Persons Supervised:	1 senior research engineer, 1 graduate student
	Period of Performance (Project):	Jan 2014 – Jan 2015
	Period of Performance (Candidate)	Jan 2014 – Jan 2015
	Contributions:	Mr Giarrusso wrote the proposal for the project and helped designed the interactive map. Mr. Giarrusso served only as a manager on this project
21	Title:	Georgia Coastal Wetlands Portal
	Contract Number:	4826689
	Sponsor:	Georgia Department of Natural Resources
	P.I.:	Yes
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$49,959.99
	Amount Funded for Project:	\$49,959.99
	Number and Rank of Persons Supervised:	1 Graduate Student
	Period of Performance (Project):	Oct 2014-Oct 2015
	Period of Performance (Candidate)	

	Contributions:	PI is creating a web portal to house and deploy Georgia wetlands data and tools. PI is responsible for all aspects of the project.
22	Title:	Enhancement of GA Coastal Atlas
	Contract Number:	48213A8
	Sponsor:	Georgia Department of Natural resources
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	\$31,349.81
	Amount Funded for Project:	\$31,349.81
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	Sept 2013 – Sept 2014
	Period of Performance (Candidate)	Sept 2013 – Sept 2014
	Contributions:	Mr Giarrusso obtained funding to supplement data compilation for the Coastal and Marine Planning project. Mr Giarrusso is also developing a guidebook for DNR to help them address new federal metadata requirements. Mr. Giarrusso is responsible for all aspects of this project.
23	Title:	Tree Canopy Baseline Study for the City of Atlanta
	Contract Number:	4826656
	Sponsor:	City of Atlanta
	P.I.:	Tony Giarrusso
	Candidate's Role:	Principal Investigator
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$65, 697
	Amount Funded for Project:	\$65,697
	Number and Rank of Persons Supervised:	[1 RS2, 2 students]]
	Period of Performance (Project):	2012-2014
	Period of Performance (Candidate)	2012-2014

	Contributions:	Responsible for all aspects of the project (proposal writing, concept, methods, execution, budget, supervision, report writing, etc) Supervise one RS2 on analytic techniques, supervise two students helping with project)
24	Title:	Building the Regional Information Management System to Support Coastal Planning
	Contract Number:	4826654
	Sponsor:	Georgia Department of Natural Resources
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$60,000
	Amount Funded for Project:	\$60,000
	Number and Rank of Persons Supervised:	1 associate director of SEI, 1 RS2, 2 graduate students
	Period of Performance (Project):	7/11 – 5/13
	Period of Performance (Candidate)	7/11 – 5/13
	Contributions:	Representing the State of Georgia as the technical lead on regional project with SC, NC, and FL.
25	Title:	Georgia Ocean Planning Initiative (GCAMP)
	Contract Number:	ICOL - 13366BU(118260)
	Sponsor:	Georgia Department of Natural Resources
	P.I.:	Mary Hallisey-Hunt (GT Strategic Energy Institute)
	Candidate's Role:	Co-PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$125,000
	Amount Funded for Project:	\$250,000
	Number and Rank of Persons Supervised:	1 RS2, 2 graduate students
	Period of Performance (Project):	2011 - 2016

	Period of Performance (Candidate)	2011-2016
	Contributions:	Mr. Giarrusso is the technical lead on this project, developing work flows and designing tools, providing supervision to RS2 and students developing web mapping sites and compiling data, report writing, conducting stakeholder workshops, and other project tasks.
26	Title:	Southeast Ocean Renewable Energy Project
	Contract Number:	482642
	Sponsor:	Southern Alliance For Clean Energy
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$22,665
	Amount Funded for Project:	\$22,665
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	7/09 – 8/10
	Period of Performance (Candidate)	7/09 – 8/10
	Contributions:	Mr. Giarrusso was technical lead, developed work flows, performed analysis, tool development, database compilation. Supervised one student
27	Title:	Web Based Mapping Pilot (Childcare and Recreation)
	Contract Number:	4826637
	Sponsor:	The Arthur M. Blank Family Foundation
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$32,164
	Amount Funded for Project:	\$32,164
	Number and Rank of Persons Supervised:	

	Period of Performance (Project):	8/08-5/09
	Period of Performance (Candidate)	8/08-5/09
	Contributions:	Spatial analysis, map and data creation, report writing
28	Title:	Technical Assistance for the Atlanta Falcons Youth Foundation
	Contract Number:	4826634
	Sponsor:	The Arthur M. Blank Family Foundation
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$10,000
	Amount Funded for Project:	\$10,000
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2/08-2/09
	Period of Performance (Candidate)	2/08-2/09
	Contributions:	Spatial analysis, map and data creation, report writing
29	Title:	Metropolitan Atlanta Land Supply
	Contract Number:	4826624
	Sponsor:	Atlanta Neighborhood Development Partnership
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$20,980
	Amount Funded for Project:	\$20,980
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	9/06 – 1/07
	Period of Performance (Candidate)	9/06 – 1/07

	Contributions:	Spatial analysis, map and data creation, report writing
30	Title:	Developing a User Guide for Coastal Development Alternatives
	Contract Number:	4826623
	Sponsor:	Ga Dept of Natural Resources
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$20,475
	Amount Funded for Project:	\$20,475
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	7/06 – 3/08
	Period of Performance (Candidate)	7/06 – 3/08
	Contributions:	Data compilation and visualization
31	Title:	GIS Support for Falcons Fitness Zones
	Contract Number:	4826622
	Sponsor:	Arthur M. Blank Family Foundation
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$28,204
	Amount Funded for Project:	\$28,204
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	6/06-5/07
	Period of Performance (Candidate)	6/06-5/07
	Contributions:	Spatial analysis, map and data creation, report writing
32	Title:	BeltLine Information System
	Contract Number:	4826619
	Sponsor:	Atlanta Development Authority (Invest Atlanta)

	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$13,471
	Amount Funded for Project:	\$13,471
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	4/06 – 9/07
	Period of Performance (Candidate)	4/06 – 9/07
	Contributions:	Map and data creation
33	Title:	Walkable Network Analysis – City of Atlanta Parks
	Contract Number:	4826618
	Sponsor:	City of Atlanta
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$13,500
	Amount Funded for Project:	\$13,500
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	12/05-2/06
	Period of Performance (Candidate)	12/05-2/06
	Contributions:	Spatial analysis, map and data creation, report writing
34	Title:	Walking to School in Georgia
	Contract Number:	48266CS
	Sponsor:	Georgia Department of Human Resources
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$42,109
	Amount Funded for Project:	\$42,109
	Number and Rank of Persons Supervised:	1 graduate student

	Period of Performance (Project):	4/05-6/06
	Period of Performance (Candidate)	4/05-6/06
	Contributions:	Spatial analysis, map and data creation, report writing
35	Title:	Digital Conversion of Stormwater Index Maps
	Contract Number:	4826630
	Sponsor:	City of Atlanta
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$19,927
	Amount Funded for Project:	\$19,927
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	9/05-9/07
	Period of Performance (Candidate)	9/05-9/07
	Contributions:	Spatial analysis, map and data creation, report writing
36	Title:	BeltLine and Greenprinting Support
	Contract Number:	48266CV
	Sponsor:	Trust for Public Land
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$14,521
	Amount Funded for Project:	\$14,521
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	9/05-9/07
	Period of Performance (Candidate)	9/05-9/07
	Contributions:	Spatial analysis, map and data creation, report writing

37	Title:	Childcare Information System
	Contract Number:	48266CN
	Sponsor:	Arthur M. Blank Family Foundation
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$25,363
	Amount Funded for Project:	\$25,363
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	9/04-3/06
	Period of Performance (Candidate)	9/04-3/06
	Contributions:	Spatial analysis, map and data creation, report writing
38	Title:	Military Base Encroachment at Fort Benning – Phase II
	Contract Number:	4826614
	Sponsor:	The Nature Conservancy
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$18,261
	Amount Funded for Project:	\$18,261
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	11/04-4/05
	Period of Performance (Candidate)	11/04-4/05
	Contributions:	Spatial analysis, map and data creation, report writing
39	Title:	Greenspace Information Support System
	Contract Number:	48266CM, 48266CJ
	Sponsor:	Fulton County, Chattahoochee Hill Country
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes

	Amount Funded for Task:	\$18,000
	Amount Funded for Project:	\$18,000
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	8/03-1/04
	Period of Performance (Candidate)	8/03-1/04
	Contributions:	Spatial analysis, map and data creation, report writing
40	Title:	Potential Greenspace Information System (Phases I, II, III)
	Contract Numbers:	48066AZ, 48266CH, 4826800
	Sponsor:	Arthur M. Blank Family Foundation
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$13,520, \$17,220, \$16,816 (\$47,556)
	Amount Funded for Project:	\$13,520, \$17,220, \$16,816 ---(\$47,556)
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	4/02 – 8/02, 2/03-1/04, 3/04-9/04
	Period of Performance (Candidate)	4/02 – 8/02, 2/03-1/04, 3/04-9/04
	Contributions:	Spatial analysis, map and data creation, report writing
41	Title:	Fort Stewart Encroachment
	Contract Number:	4826603
	Sponsor:	Trust for Public Land
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$21,273
	Amount Funded for Project:	\$21,273
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	3/03-6/04

	Period of Performance (Candidate)	3/03-6/04
	Contributions:	Spatial analysis, map and data creation, report writing
42	Title:	Greenspace Acquisition Support System Phase II
	Contract Number:	4826603
	Sponsor:	Trees Atlanta
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$39,241
	Amount Funded for Project:	\$39,241
	Number and Rank of Persons Supervised:	1 graduate student
	Period of Performance (Project):	8/02-7/03
	Period of Performance (Candidate)	8/02-7/03
	Contributions:	Spatial analysis, map and data creation, report writing
43	Title:	Fort Benning Encroachment
	Contract Number:	4806889
	Sponsor:	The Nature Conservancy
	P.I.:	Tony Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	Yes
	Amount Funded for Task:	\$12,984
	Amount Funded for Project:	\$12,984
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	3/02 – 10/02
	Period of Performance (Candidate)	3/02 – 10/02
	Contributions:	Spatial analysis, map and data creation, report writing

44	Title:	Development of NWI Data Dictionary and GIS Tools for GA
	Contract Number:	4806W70
	Sponsor:	State of Georgia
	P.I.:	Steve French
	Candidate's Role:	Co-PI
	Budgetary Authority?	No
	Amount Funded for Task:	\$75,000
	Amount Funded for Project:	\$110,040
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	6/00 – 12/01
	Period of Performance (Candidate)	6/00 – 12/01
	Contributions:	developed dictionary and created software tools
45	Title:	Greenspace Support System
	Contract Number:	4807874
	Sponsor:	Trees Atlanta
	P.I.:	Steve French
	Candidate's Role:	Co-PI
	Budgetary Authority?	No
	Amount Funded for Task:	\$29,437
	Amount Funded for Project:	\$29,437
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2/01-2/02
	Period of Performance (Candidate)	2/01-2/02
	Contributions:	developed methods, created maps, wrote report

2. Internally Funded Programs for which the Candidate Served in a Leadership Role

1.	Title:	Geo-spatial and economic assessment of the potential development of Bioenergy combined with Direct Air Carbon Capture (BEDAC) in the USA
	Contract Number:	DE00019605
	Sponsor:	GT EVPR Seed Grant

	P.I.:	Reaff
	Candidate's Role:	CO-PI
	Budgetary Authority?	YES
	Amount Funded for Task:	15,000
	Amount Funded for Project:	32,602
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	2021-2022
	Period of Performance (Candidate)	2021-2022
	Contributions:	Map creation, data compilation, proposal and paper writing
2.	Title:	Update Virtual Virungas
	Contract Number:	
	Sponsor:	Smithgall Watts Grant (Bio) – Joint project with Zoo Atlanta
	P.I.:	Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	15,000
	Amount Funded for Project:	15,000
	Number and Rank of Persons Supervised:	1 Research Scientist
	Period of Performance (Project):	2017 -2018
	Period of Performance (Candidate)	2017 - 2018
	Contributions:	Supervise sandbox updates
3.	Title:	Tracking Wetlands and Waterbody Loss In and Around Volcanoes National Park, Rwanda
	Contract Number:	
	Sponsor:	Smithgall Watts Grant (Bio) – Joint project with Zoo Atlanta
	P.I.:	Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	15,000
	Amount Funded for Project:	15,000
	Number and Rank of Persons Supervised:	1 Research Scientist
	Period of Performance (Project):	2017 -2018
	Period of Performance	2017 - 2018

	(Candidate)	
	Contributions:	Updates to the original map will include more vegetation samples and 2014 ranging data.
4.	Title:	Gorilla 3-D Visualization of Gorilla Habitat
	Contract Number:	4825617 – GT Foundation
	Sponsor:	Smithgall Watts Grant (Bio) – Joint project with Zoo Atlanta
	P.I.:	Giarrusso
	Candidate’s Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	15,000
	Amount Funded for Project:	15,000
	Number and Rank of Persons Supervised:	1 Research Scientist II, 1 undergraduate student
	Period of Performance (Project):	2015– 2016
	Period of Performance (Candidate)	October 2015– September 2016
	Contributions:	Managing team to create virtual sandbox of gorilla habitat and IPAD augmented reality of habitat. PI will visit Rwanda in summer 2016 to implement sandbox at Karisoke Research Center and teach class in GIS to staff members of Fossey group in Congo.
5.	Title:	Gorilla Map
	Contract Number:	
	Sponsor:	Smithgall Watts Grant (Bio) – Joint project with Zoo Atlanta
	P.I.:	Giarrusso
	Candidate’s Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	15,000
	Amount Funded for Project:	15,000
	Number and Rank of Persons Supervised:	1 Research Scientist
	Period of Performance (Project):	2014-2015
	Period of Performance (Candidate)	2014-2015
	Contributions:	Mr Giarrusso created an interactive map showing mountain gorilla ranging patterns from 1999-2011 in Volcanoes National Park, Rwanda. Additionally, Mr Giarrusso integrated vegetation data with other relevant datasets for the park to help scientists with the Dianne Fossey Foundation how to better understand gorilla

		behavior through visualization of their data
6.	Title:	Gorilla Map Update and Vegetation Mapping
	Contract Number:	
	Sponsor:	Smithgall Watts Grant (Bio) – Joint project with Zoo Atlanta
	P.I.:	Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	15,000
	Amount Funded for Project:	15,000
	Number and Rank of Persons Supervised:	1 Research Scientist
	Period of Performance (Project):	2013 - 2014
	Period of Performance (Candidate)	2013 -2014
	Contributions:	Updates to the original map will include more vegetation samples and 2014 ranging data.
7.	Title:	Biomass Resources Information and Routing System
	Contract Number:	
	Sponsor:	Strategic Energy Institute Creating Energy Options Seed Grant
	P.I.:	Giarrusso
	Candidate's Role:	PI
	Budgetary Authority?	YES
	Amount Funded for Task:	30,000
	Amount Funded for Project:	30,000
	Number and Rank of Persons Supervised:	1 Graduate Research Assistant
	Period of Performance (Project):	2009
	Period of Performance (Candidate)	2009
	Contributions:	development of a Biomass Resource Information and Routing System (BRIARS), a web GIS-based site suitability tool designed to help identify significant biomass areas in Georgia

B. Additional Supervisory Responsibilities

In 2010, Mr. Giarrusso was appointed associate director of the CSPAV (CGIS in 2010), where he currently balances his administrative and leadership responsibilities with his growing research, teaching, and service agenda. As associate director of CSPAV,

Mr. Giarrusso mentors the research faculty, with a focus on helping them obtain external funding. He also provides promotion guidance to CSPAV research faculty. Additionally, in his role as Associate Director, he produces a bi-annual CSPAV newsletter, helps maintain the CSPAV website, gives tours to visitors, and is responsible for the center when the director is away.

C. Individual Student Guidance/Development

Mr. Giarrusso has directly supervised and/or provided mentorship to over 30 students during his tenure at Georgia Tech. The majority were Masters of City and Regional Planning graduate students followed by graduate students in the MS GIST program. Mr. Giarrusso also served as advisor to several GT Presidential Undergrad Research Award (PURA) winners, all of whom were former students in his Fundamentals of GIS class (CP4510).

1. Masters Students Supervised (served as advisor)

Sara Snell, MS GIST 2015
Laurel Carrao, MCRP 2018
William Cooney, MCRP 2022

2. Masters Special Problems Students

Marcela Moreno, MCRP, 2017
Yuxuan Chen, MS GIST 2021

3. Undergraduate Special Problems Students (GT PURA)

2016: Sofia Awan
2020: Soniya Bhagat
2020: Halley Callaway
2021: Hunter Darsey

4. Graduate Research Assistants, Student Assistants, Co-Op Students

4.1 Graduate Research Assistants

2004: Jason Barringer (MCRP)
2005: Jason Barringer (MCRP), Sandy Wexler (MCRP)
2006: Sandy Wexler (MCRP), Sarah Smith (MCRP)
2007: Scott Stephens (MCRP), Adam Sauer (MS ARCH)
2008: Scott Stephens (MCRP), Sarah Smith (MCRP), Adam Sauer (MS ARCH), Luke Wilkinson (MCRP)
2009: Adam Sauer (MS ARCH), Sarah Smith (MCRP)
2010: Vanhvilai Doungchai (MCRP), Abjai Sood (MS ISYE)
2011: Vanhvilai Doungchai (MCRP), Min Na (MCRP)
2012: Min Na (MCRP), Daniel Alhadeff (MS ARCH), Gillam Campbell (MCRP)
2013: Daniel Alhadeff(MS ARCH), Amy Atz (MS GIST), Wade Ingram (MCRP)

2014: Daniel Alhadeff (MS ARCH), Kait Morano (MCRP), Tyler Tyger (MCRP), Ryan Bowman (MCRP)
2015: Kait Morano (MCRP), Taylor Tyger (MCRP)
2016: Chase Bennett (MS GIST)
2017: Chase Bennett (MS GIST), Jeremy Nichols (MS CE)
2018: Jeremy Nichols (MS CE), Tara McKinnon (MS GIST), Laurel Carrao (MCRP), Chase Bennett (MS GIST)
2019: Tara McKinnon (MS GIST), Laurel Carrao (MCRP)
2020: Laurel Carrao (MCRP)

4.2 Student Assistants

2003: Chioma Nwachuku (INTA), Ian Anderson (CE)
2013: Jeremy Nichols (CE)
2017: Jenna McConnico (ISYE), Gabriella Adler (ISYE)
2020: Cody Arnold (CE)
2023: Jenny Baker (EnvE)

4.3 Co-Op Students

2018: Glenn Adamson (Incoming Freshman)
2018: Clarissa Costen (High School Student)
2019: Brooke Robinson (Incoming Freshman)

D. Collective Student Development/Teaching

For the last twenty-one years, Mr. Giarrusso has taught classes almost every semester (except summers) in City and Regional Planning. He routinely teaches Fundamentals of GIS, CP 4510, the only undergraduate GIS course on campus. In addition to CP 4510, Mr. Giarrusso has taught several graduate MCRP classes and launched a pilot online GIS course in the summer of 2013. Mr. Giarrusso co-lead a Data Science for Social Good (DSSG) course in the summer of 2014 focused on street tree data visualization tools for Atlanta.

<https://geospatial.gatech.edu/Greenspace/>

In 2023, Mr. Giarrusso co-founded and co-led the first spring break study abroad on sustainable development in Rwanda, Africa. This partnership between CSPAV and ISYE has expanded to include faculty members from Modern Languages in 2025. This effort was well-received by GT administrators. Please visit <https://arcg.is/1Ovi84> for more information. This effort was recently followed by Mr. Giarrusso's assistance with an assistive technology VIP class trip to Rwanda in 2024. Mr. Giarrusso will co-teach the VIP class in the fall with researchers from the Center for Inclusive Design, Technology, and Innovation in the College of Design.

It should be noted that Mr. Giarrusso has received excellent course evaluations over the past twenty years. He routinely scores > 4.5 on the standard institute

course evaluation, scoring consistently high (> 4.8) in the “effective teacher” category. In Spring 2023, Mr. Giarrusso received a teaching “Honor Roll” award from the institute, which recognizes the 50 top-rated instructors at GT. In the Fall of 2023, Mr. Giarrusso was also nominated for the College of Design Teacher of the Year award. He also received CETL Teacher of the Year recognition in 2017.

Semester	Course	Title	Students
Spring 2024	CP4510	Fundamentals of GIS	48
Fall 2023	CP4510	Fundamentals of GIS	46
Spring 2023	CP4510	Fundamentals of GIS	43
Fall 2022	CP4510	Fundamentals of GIS	28
Spring 2022	CP4510	Fundamentals of GIS	30
Fall 2021	CP4510	Fundamentals of GIS	31
Spring 2021	CP4510	Fundamentals of GIS	31
Fall 2020	CP4510	Fundamentals of GIS	28
Spring 2020	CP4510	Fundamentals of GIS	30
Fall 2019	CP 8881	StoryMaps	
Fall 2019	CP4510	Fundamentals of GIS	25
Spring 2019	CP4510	Fundamentals of GIS	25
Fall 2018	CP4510	Fundamentals of GIS	28
Spring 2018	CP4510	Fundamentals of GIS	28
Fall 2017	CP4510	Fundamentals of GIS	29
Fall 2017	CP 6591	GIS Seminar	6
Spring 2017	CP4510	Fundamentals of GIS	31
Fall 2016	CP4510	Fundamentals of GIS	31
Spring 2016	CP4510	Fundamentals of GIS	33
Fall 2015	CP4510	Fundamentals of GIS	35
Spring 2015	CP4510	Fundamentals of GIS	35
Fall 2014	CP4510	Fundamentals of GIS	33
Spring 2014	CP4510	Fundamentals of GIS	35
Fall 2013	CP4510	Fundamentals of GIS	35
Summer 2013	CP4510/6514	Fundamentals of GIS	35
Spring 2013	CP4510/6514	Fundamentals of GIS	34
Fall 2012	CP4510	Fundamentals of GIS	26
Summer 2012	CP4510/6514	Fundamentals of GIS	28
Spring 2012	CP4510	Fundamentals of GIS	25
Fall 2011	CP4510	Fundamentals of GIS	28
Fall 2011	CP6514	Fundamentals of GIS	25
Spring 2011	CP4510	Fundamentals of GIS	27
Fall 2010	CP4510	Fundamentals of GIS	23

Fall 2010	CP6514	Fundamentals of GIS	28
Spring 2010	CP4510	Fundamentals of GIS	25
Fall 2009	CP4510	Fundamentals of GIS	26
Summer 2009	CP4510	Fundamentals of GIS	20
Spring 2009	CP4510	Fundamentals of GIS	20
Spring 2008	CP4510	Fundamentals of GIS	17
Spring 2007	CP4510	Fundamentals of GIS	29
Spring 2006	CP4510	Fundamentals of GIS	32
Fall 2005	CP4510	Fundamentals of GIS	21
Fall 2004	CP4510	Fundamentals of GIS	29
Fall 2003	CP4510	Fundamentals of GIS	23
Fall 2002	CP4510	Fundamentals of GIS	29

IV. Sponsored Research Development

A. Research Program Development

Over the last twenty-four years, Mr. Giarrusso has been using GIS to address issues across a variety of disciplines and industries. In the first five or six years of his career, Mr. Giarrusso’s research focused primarily on creating GIS tools and methods to analyze land, with the specific intent of identifying, prioritizing and protecting environmentally sensitive lands for set aside as parks or greenspace. His first clients were locally based non-profits and county governments interested in utilizing his GIS based tools and methods to help further their causes. The success of his projects over this time helped Mr. Giarrusso expand his research agenda to work on similar issues at larger scales and with nationally based non-profits like the Trust for Public Lands, the Nature Conservancy, and the Boys and Girls Clubs. Additionally, after learning of some of Mr. Giarrusso’s work through publications, presentations and word of mouth, several different local sponsors such as the City of Atlanta, the Georgia Department of Natural Resources Coastal Resources Division, and the Georgia Department of Public Health, approached Mr. Giarrusso about applying his GIS research tools and techniques to analyze problems in other areas like public health, park access and opportunity, childcare, and ocean-based planning.

Due to the lack of large, sustained funding opportunities in the area of greenspace and land protection and a general downturn in the economy, in 2007-2008 Mr. Giarrusso began to expand his research agenda to address larger, more funding-ready issues such as renewable energy and regional planning. This effort resulted in biofuel work for Chevron and an offshore wind study for Georgia, both of which helped him establish working relationships with federal agencies and industry heads that continue today. Also, through modification of routing algorithms and database methods he

developed in his biofuel research, Mr. Giarrusso was able to win the internal GT Creating Energy Options seed grant in 2009 by proposing a Biomass Information System for Georgia. In 2012, Mr. Giarrusso's GIS expertise was nationally recognized as he was invited to be one of twenty expert panelists on "Play Deserts" convened by the Centers for Disease Control; he was also one of twenty-five invited participants to a GIS data portal workshop hosted by the National Atmospheric and Oceanic Administration (NOAA) in 2012, which turned into his serving as Georgia's technical lead on a NOAA-led regional ocean planning consortium. The involvement with the regional ocean planning consortium was a direct result of his participation in two large coastal projects; 1. GCAMP - a five-year project (2010-2015) with the Georgia Department of Natural Resources Coastal Resources Division where Mr. Giarrusso built a GIS-based ocean planning portal that contains resources, data, interactive map-based applications for offshore planning in Georgia and, 2., the Governor's South Atlantic Alliance (GSSA) project - a joint effort between Georgia, North Carolina, South Carolina, and Florida to create a regional information management system to support coastal and marine planning. The success of these projects, which continues today, was nationally recognized in 2019 when Mr. Giarrusso served as the plenary speaker at the Ocean Visions conference and again in 2020 when he served as the technical keynote speaker at Environmental Systems Research Institute's (ESRI) Ocean and Climate Conference, arguably the most recognized GIS-based conference on ocean and climate planning in the United States. Mr. Giarrusso has also presented this work at other national conferences, such as NOAA Coastal GeoTools, for example. It should be noted that GCAMP is an ongoing project, with Mr. Giarrusso managing/directing/updating the GCAMP portal on an annual basis.

In parallel with his coastal and marine planning research between 2010 and now, Mr. Giarrusso has developed a nationally recognized expertise in Atlanta's tree canopy and land cover through several canopy assessments and change detection projects completed between 2008 and today, with the fourth project currently underway. Several local and national news outlets (NYT, CNN, NPR, AJC) have written about his work and he has been an invited several times over the years to present this work at national conferences, such as the American Association of Geographers annual conference.

B. Research Proposals

See Part III, Section A for a list of over 50 externally and internally funded research projects where Mr. Giarrusso served a leadership role. The following lists will highlight funded projects where Mr. Giarrusso did not serve in a leadership role as well as unfunded research proposals.

1. Funded Proposals where Mr. Giarrusso did not Serve in a Leadership Role

1	Title:	Small Bets Fallujah
	Contract Number:	D000018868
	Sponsor:	Georgia Tech - GTRI
	P.I.:	Caravati
	Candidate's Role:	task leader
	Budgetary Authority?	no
	Amount Funded for Task:	2,500
	Amount Funded for Project:	75,000
	Number and Rank of Persons Supervised:	0
	Period of Performance (Project):	10/20-10/21
	Period of Performance (Candidate)	21-Mar
	Contributions:	imagery analysis and data compilation
2	Title:	Georgia Drawdown
	Contract Number:	
	Sponsor:	Ray C. Anderson
	P.I.:	Marilyn Brown
	Candidate's Role:	task leader
	Budgetary Authority?	no
	Amount Funded for Task:	10,000
	Amount Funded for Project:	800,00
	Number and Rank of Persons Supervised:	0
	Period of Performance (Project):	1/21- ongoing
	Period of Performance (Candidate)	5/21-9/21
	Contributions:	data compilation and analysis
3	Title:	Energy for Georgia Economic, Environmental and Social Sustainability
	Contract Number:	240668T
	Sponsor:	Power4Georgians
	P.I.:	Valerie Thomas (ISYE)
	Candidate's Role:	Investigator
	Budgetary Authority?	No
	Amount Funded for Task:	\$16,200
	Amount Funded for Project:	\$30,767

	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	1/09-1/10
	Period of Performance (Candidate)	1/09-1/10
	Contributions:	Data analysis and visualization
4	Title:	Facility Location/Allocation Models for Biomass Energy Protection
	Contract Number:	1906AD8
	Sponsor:	Chevron Texaco
	P.I.:	Matthew Realff (ChBE)
	Candidate's Role:	Co-PI
	Budgetary Authority?	No
	Amount Funded for Task:	\$80,000
	Amount Funded for Project:	\$170,829
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	1/07 – 2/09
	Period of Performance (Candidate)	1/07 – 2/09
	Contributions:	Spatial analysis, map and data creation, report writing
5	Title:	City of Atlanta Parks Research Initiative
	Contract Number:	4826618
	Sponsor:	Emory University/City of Atlanta
	P.I.:	Karen Mumford
	Candidate's Role:	Co-PI
	Budgetary Authority?	No
	Amount Funded for Task:	\$10,000
	Amount Funded for Project:	\$100,00
	Number and Rank of Persons Supervised:	
	Period of Performance (Project):	10/05 – 9/06
	Period of Performance (Candidate)	10/05 – 9/06
	Contributions:	Map and data creation
6	Title:	Neighborhood Parks and Active Living
	Contract Number:	4826610

Sponsor:	Robert Woods Johnson
P.I.:	Howie Frumkin/Karen Mumford
Candidate's Role:	Task leader
Budgetary Authority?	No
Amount Funded for Task:	\$30,000
Amount Funded for Project:	600,000
Number and Rank of Persons Supervised:	
Period of Performance (Project):	10/05 – 9/06
Period of Performance (Candidate)	10/05 – 9/06
Contributions:	Map and data creation

2. Unfunded Proposals (Internal and External)

1	Title:	Global Climate Center
	Sponsor	NSF
	Role	task leader
	Amount requested	\$ 1.7 million (250k for CSPAV)
	Date Submitted	Jul-23
	Result	not funded
	Contribution to Proposal	proposal assistance, wrote scope of work and developed budget
2	Title:	Energy and Environmental Justice Assessment
	Sponsor	DOE-NETL
	Role	CO-PI
	Amount requested	130000
	Date Submitted	12/2022
	Result	not funded
	Contribution to Proposal	proposal assistance, wrote scope of work and developed budget
3	Title:	A Data-Driven Risk Prediction for Road Condition Assessment and Maintenance Prioritization
	Sponsor	CTEDD
	Role	CO-PI
	Amount requested	112181
	Date Submitted	20-Oct
	Result	not funded

	Contribution to Proposal	co-wrote and edited proposal
4	Title:	Reinvigorating Regional Ocean Data Sharing in the South Atlantic through establishment of the Southeastern Atlantic Partnership for Ocean Data (SEAPOD)
	Sponsor	SECOORA
	Role	PI
	Amount requested	91,000
	Date Submitted	11/2021
	Result	not funded
	Contribution to Proposal	wrote proposal, put together team from 4 universities
5	Title:	Air Pollution, Health and Sustainability in Sub-Saharan Africa: A Case Study in Rwanda
	Sponsor	GT Small Bets - EVPR
	Role	Co-PI
	Amount requested	75,000
	Date Submitted	3/2020
	Result	not funded
	Contribution to Proposal	co-wrote and edited proposal
6	Title:	Georgia (Garnering Effective Outreach and Research in Georgia for Impact Alliance) CEAL
	Sponsor	NIH
	Role	GIS Support
	Amount requested	250,000
	Date Submitted	11/2020
	Result	not funded
	Funding Level	
	Period of Performance	
	Contribution to Proposal	contributor
7	Title:	Survey of US Community Pediatricians on Management of Children in Ambulatory Setting during COVID-19 Pandemic
	Sponsor	NIH

	Role	GIS Support
	Amount requested	125,000
	Date Submitted	5/2020
	Result	not funded
	Contribution to Proposal	contributor
8	Title:	Directionality of COVID19 Transmission between Children and Household Contacts
	Sponsor	NIH
	Role	GIS Support
	Amount requested	175,000
	Date Submitted	10/2020
	Result	not funded
	Contribution to Proposal	contributor
9	Title:	Identifying Green Infrastructure Locations for Non-Point Source Pollution on Georgia's Coast
	Sponsor	Georgia DNR
	Role	CO-PI
	Amount requested	160,000
	Date Submitted	12/2019
	Result	not funded
	Contribution to Proposal	co-wrote and edited proposal
10	Title:	A Data-Driven Risk Prediction for Road Condition Assessment and Maintenance Prioritization
	Sponsor	CTEDD
	Role	CO-PI
	Amount requested	121,000
	Date Submitted	10/2019
	Result	not funded
	Contribution to Proposal	co-wrote and edited proposal
11	Title:	Load Capacity Measurement for the Juan Fernandez Archipelago, Chile
	Sponsor	Ministry of the Interior-Chile
	Role	Task leader

	Amount requested	460,000
	Date Submitted	10/2019
	Result	not funded
	Contribution to Proposal	review task descriptions, provide technical guidance
12	Title:	Safe Routes to School Potential Walkability Database for Georgia
	Sponsor	GDOT
	Role	PI
	Amount requested	100,530
	Date Submitted	9/2019
	Result	not funded
	Contribution to Proposal	wrote the proposal, developed budget
13	Title:	Atlanta Regional Landuse Modeling and S16 Small Area Forecasting
	Sponsor	Atlanta Regional Commission
	Role	CO-PI
	Amount requested	161,110
	Date Submitted	5/2019
	Result	not funded
	Contribution to Proposal	co-wrote and edited the proposal. Worked with external partners to compile the proposal
14	Title:	GIS Video Tutorials for GDOT
	Sponsor	GDOT
	Role	PI
	Amount requested	77,564
	Date Submitted	3/2019
	Result	not funded
	Contribution to Proposal	Worked with GDOT to compile the proposal and budget.
15	Title:	Asheville Urban Tree Canopy Assessment
	Sponsor	City of Asheville NC
	Role	PI
	Amount requested	75,000
	Date Submitted	9/2018
	Result	not funded

	Contribution to Proposal	wrote the proposal, developed budget
16	Title:	Cataloging Blighted Properties in DeKalb County, GA
	Sponsor	DeKalb County, GA
	Role	PI
	Amount requested	267,000
	Date Submitted	9/2018
	Result	not funded
	Contribution to Proposal	wrote the proposal, developed budget
17	Title:	Spatial Planning Toolkit for Urban WASH Services - Finding and Reaching Underserved Populations
	Sponsor	Gates Foundation
	Role	CO-PI
	Amount requested	100,000
	Date Submitted	9/2018
	Result	not funded
	Contribution to Proposal	co-wrote proposal with Emory PI
18	Title:	Geospatial Tools and Resources for Coastal Georgia
	Sponsor	Georgia DNR
	Role	PI
	Amount requested	160,000
	Date Submitted	12/2017
	Result	not funded
	Contribution to Proposal	wrote the proposal, developed budget
19	Title:	HIV Big Data Mapping
	Sponsor	South Big Data Hub
	Role	Co-PI
	Amount requested	78,000
	Date Submitted	10/2017
	Result	not funded
	Contribution to Proposal	wrote the section and budget for CSPAV portion

V. OUTREACH AND SERVICE

A. Professional Activities:

- Member Georgia URISA
- Member Association of American Geographers
- Atlanta Park Pride Advisory Board Member (2006-2008)
- Georgia Technical Representative – Governor’s South Atlantic Alliance (2012-2015)
- Georgia Technical Representative – NOAA’s Regional Ocean Portal Advisory Committee (2012-present)
- CDC National Expert Panel on “Play Desserts” – (2016)
- Member of Georgia Department of Natural Resources’ Coastal Advisory Council since 2022

B. On Campus Committees/Organizations:

- Research Faculty Representative on Faculty Assembly and Academic Senate (2004-2006, 2011-2013)
- Co-leader Data Science for Social Good Tree Team (2014)
- MS GIST Advisory Committee (2015-2020)
- Dean’s Advisory Committee (2015-2019)
- Institute Promotion Committee for Research Faculty (2021-present)
- Welcome Wreck Ambassador (2024 -)

C. Special Activities: Freshman Mentor (2005), Data Science for Social Good (DSSG) mentor (2015), Diane Fossey Gorilla Fund International - provide GIS services (2010 – present)

D. Outside Professional Activities/Consulting: Mr. Giarrusso has consulted extensively over the last 20 years and has a well-established, local and national clientele. His consulting activities focus on working with real estate firms to identify suitable areas for low income housing tax credit housing, environmental planning, freight and transportation planning, economic development, and public health, just to name a few.

Selected List of Clientele:

- Prestwick Development – local real estate firm
- Tapestry Development – local non-profit housing
- Lincoln Ave Capital – national real estate firm
- Mercy Housing – national non-profit housing
- Spatial Plans- local spatial planning consulting firm
- Interdev – local planning firm
- The Nature Conservancy – national environmental advocacy group
- One Hundred Miles – coastal Georgia environmental advocacy group
- City of Decatur

