ADDENDUM #1 FOR 17-071
BUSINESS INTELLIGENCE SYSTEM
FOR GOTRIANGLE

THIS ADDENDUM #1 IS ISSUED: OCTOBER 20, 2017

QUESTIONS AND ANSWERS
The following questions were posed by firms that indicated an interest in this Request for Proposals (RFP) document from GoTriangle. The purpose of this Request for Clarifications is to answer those questions.

PROPOSAL SUBMITTAL DEADLINE
The Proposal Submittal Deadline remains unchanged and proposals will be received until **November 10, 2017 at 3:00 pm. EDT**.

QUESTIONS AND ANSWERS	
Item	Questions and Answers
1	*Question:* If you can give a better sense of guidance on the scale in terms of a dollar range of what you expect to procure in terms of these services? *Answer:* *We have a policy that we do not disclose the budget amount.*
2	*Question:* The RFP reads almost as if you looking for a solution out-of-the-box that would address all the different dashboards and views as if it was a canned solution. Is that your expectation or are you leading more towards having the ability to develop those hundred or so reports and dashboards? *Answer:* *We understand that because of the unique regional nature of our transit services and the nature of the transit market in general, that there are not necessarily products that will meet our needs directly out-of-the-box. We want a customizable system, and we would expect that vendors' proposals include helping us configure the system according to our specifications and our needs additionally. Some outputs like the National Transit Database (NTD) reports are crucial to us getting continued grant funding, so we are going to be looking for products that are familiar with doing those outputs. If that is a canned solution, that is in your favor.*
3	*Question:* Written questions are still due by October 20th? *Answer:* *Yes.*

4	Question:
	In the RFP, it did not talk about the expected number of users. Is this something that you are looking at from user base standpoint or open to all internal or external resources third-party?
	Answer:
	We are not necessarily envisioning the dashboard system itself will be open to public access, but we definitely want to be able to export reports from the dashboard system and publish them online. We do expect the system to be usable by multiple concurrent users at GoTriangle and potentially at the sites of our transit partners. We would say a rough order of magnitude would be 10-20 concurrent users and several dozen who have access to the system.
5	Question:
	Do you have an approximate size of the data to be loaded?
	Answer:
	That is difficult to answer exactly. We can say at worst case scenario that our Automated Passenger Counters generate as an upper bound across all agencies, 20 gigabytes of Raw Data per year, you might not need to input all that Raw Data into the system. We have additional Data Sources, but we are not sure the order of magnitude estimate for farebox database. We might be able to provide rough order of magnitude estimates the size of these data sets, but not everyone at GoTriangle has direct access working with all these data sets, so we not sure if we can provide a complete estimate. It will probably be less than 5 terabytes.
6	Question:
	The rate of growth you are expecting in the next five years, is that the 20 gigabytes you just gave?
	Answer:
	No, that is only for one data source. Worst case in terms of upper bound data growth would be one terabyte per year. We anticipate the solution to be scalable.
7	Question:
	Do you know how many total data sources you have? Some of the data sources in the RFP, are specified with N/A and it is not clear to me as to what that stands for. Yes, it might take me a minute to get to it. I have few other questions that might be more fairly reasonable.
	Answer:
	It is in the range of dozens. We cannot completely determine that because it depends on how many other agencies we are able to bring on as partners. One of the primary data sources is the Automated Passenger Counters and the rest are listed in the RFP as attachment L. As far as the N/A, we have had several meetings after working on the RFP that it might not be necessary to integrate

	some data sources into system specifically, the ones owned and operated by the City of Durham where we would need to go through their IT Department staff to get access. The data sources which are absolutely necessary in this initial phase are: • *Service Calendar* • *Urban Transportation Associates – Automated Passenger Counters* • *SPX Genfare – GFI Data System 7* • *Trapeze FX/Blockbuster* • *Trapeze PASS* • *AssetWorks* • *CCG Faster* • *Zendesk Support/Talk* • *Custom Databases for Cleanliness and Incident Reporting* • *And Attachment A* *For pricing purposes, please consider the above data sources and Attachment A (Reports) for the initial phase of the project.* *Anticipate six (6) additional reports of similar complexity for Go-Live.*
8	Question: Are you looking to pull the data directly out of production or are looking to have a data warehouse setup for separate database for reporting? This way we could create Extractions, Transforms, and Loads (ETL) to move the data real-time or at specific times or daily refresh. *Answer:* *Our major data sources like Automated Passenger Counters and Fareboxes, most of them are not seeing constant influx of activity and most of them are operating on a data dump basis. With the fareboxes, we pull in the buses at the end of the day and probe them to off load records from the fareboxes. The Automated Passenger Counters do overnight processing that loads data into the MySQL database that was described in the RFP. So it is essentially a data warehouse of sorts. It is not aggregated but it is processed data that is updated once nightly. The only data sources we identified that you would consider to have constant activity are our Trapeze PASS System that provides for our Para-Transit dispatch which is constantly used, some of the financial systems, and Zendesk, the Customer Feedback System. For some databases, we would prefer to have an ETL mirroring process and for other databases it will suffice to pull data directly from production. We encourage you all to discuss this in your proposals.*

9	Question: As far as future capabilities that would typically be attached to a Business Intelligence Application, there was no reference in RFP for predictive analytics from the data. Is this something you have thought about or are you not ready to venture down that path? For example, maintenance or for the number of riders? *Answer:* *We will respond to this question and it is applicable to the last question too. We do not know exactly the best way to achieve what we want. So, we are looking for all of you experts in the field to propose to us solutions of different ways, share with us the different options available to us so we know the pros and cons and cost implications, and staff involvement as well. We see the benefits in predictive analytics but we want to make sure we get experience using a Business Intelligence System doing its basic functions first before we jump into predictive analytics. If you have a system that can add that functionality, we are interested in knowing that and if you make the case that predictive analytics is something we can take advantage of right out-of-the-box, since we did not specify that, as long as it is not cardinal change to the RFP Scope, it should be fine.*
10	Question: How many buses are involved? *Answer:* *There are sixty (60) Buses here at GoTriangle and sixty (60) Buses at GoDurham. If other transit agencies get onboard with this today, we are in the 350 range, and over the next 5 years that could grow by another hundred or so. We definitely want this to be able to scale up well beyond that 500 or 600 buses and a light rail system then a commuter light rail system in the future.*
11	Question: Do you have a preference as far as the system being on-premise or a cloud based solution? *Answer:* *The preference is a cloud-based solution.*
12	Question: Would you value in a bid a variety of expertise in the staffing or is it primarily on the system procurement itself? *Answer:* *Per the Evaluation Criteria in Section 3.6 of the RFP, we will be looking to determine the best value for GoTriangle by evaluating proposals against six criteria. The Qualifications of Key Personnel is identified as the top priority criterion of the six listed. The variety of expertise on your staffing proposal will be valued if it is critical to the successful implementation of your proposed*

	solution. However, it will be considered in conjunction with the proposer's approach to addressing our needs, the fit of the system's capabilities with our needs, technical information provided, the proposer's experience, and with the price.
13	Question: As far as a cloud-based solution, are you subject to any regulations? Are there any Personal Health Information (PHI) concerns? *Answer:* *We are subject to Sarbanes-Oxley (SOX) compliance. We want to make that any cloud-based solution provided, you are SSAE 16 compliant as mentioned in the RFP. Additionally, we are subject North Carolina Public Records Law so we may have to disclose any information in the system other than personal information. There are exemptions in Public Records Law such as trade secrets. Moreover, we are subject to Federal Transit Administration (FTA) requirements to retain a minimum of 3 years of all data. Because since the Para-Transit System do work for Medicaid, there might be some (PHI) concerns involved in handling the Para-Transit database. We are not aware of how that dispatching and how that data segregation works there, and if Para-Transit records are considered PHI, that is something you may want to consider. In general, personal identifying information is primarily in the Para-Transit database and the Customer Feedback database. In the Farebox database we do not currently collect personal identifying information, however, there are serial numbers that could be linked to individual people if combined with other records and used to identify their travel patterns.*
14	Question: A lot of your data sources are Excel based, how do you keep that data updated and does data overlap each other? Is there anything we can do to make sure they are directly into the database? *Answer:* *We do sometimes have data integration issues but we have very detail-oriented staff and are generally confident in the data – though of course integration issues and typos are always a risk. We are definitely open to options that would reduce the number of ad-hoc spreadsheets involved in our data analysis process. That is the goal of this system.*
15	Question: There seems to be a lot questions around constructing a data warehousing box first or in parallel then import the excel spreadsheet data in order to be automated and streamlined from there. *Answer:* *If you need to construct a data warehouse in order to implement your Business Intelligence Solution that is something you would need to cover in your*

	proposal. We are considering the Business Intelligence piece and data warehouse piece as part of this single project.
16	Question: In attachment L, it talks about Zendesk and having an API, is that ODBC accessible? *Answer:* *No, it is not. Zendesk is a Software-as-a-Service product that we currently engaging in using for our customer service data. We recently started using it and we are not sure what provisions they provide to import their data into our own data warehouse. Zendesk has excellent documentation on their website for this and you will know what to look for better than us. But in short, we do not have direct access to their database.*
17	Question: Do you have an expected Go-Live date for this product and if so, does it include maintenance over time or do you want us to turn this over to you? *Answer:* *A tentative notice to proceed is for December 29th so you can expect a kick-off shortly after that. We would expect for you to provide a timeline that is achievable in your proposal. It is a desire to have this system operational in FY 2019 which starts July 1st, 2018 in order to use it for all our FY 2019 reporting and year-end reporting for FY 2018. We will not disqualify your proposal if you take longer to get the system up and running. It would be nice to have of the system usable for beta testing around April 2018, to begin testing it and get all the bugs worked out before FY 2019. You are the software experts so you know how long it would take to figure this out and deploy it.*
18	Question: In the RFP, there is no schedule plan for the Business Intelligence System? *Answer:* *A Schedule Plan shall be added as part of the addendum.*
19	Question: Do you currently have any contractor(s) running any of these services? *Answer:* *There are several. GoTriangle contracts some routes to other local government transit agencies to operate such as, GoDurham, GoRaleigh, GoCary, and Chapel Hill Transit. GoCary and GoRaleigh do have a professional management contract. GoCary is with MV Transportation and GoRaleigh is with Transdev. We are not sure how this would impact your ability to access their*

	data.
20	Question: If the expected system shall be maintained over time should this be placed into the schedule and budget as well? *Answer:* *Yes, we are expecting your proposal to include maintaining the system over time.*
21	Question: What are expectations with respect of having on-site developers vs. remote or even off-shore developers working on your project? *Answer:* *It is important that we have excellent project management from the proposer, including an effective communications plan that runs through all phases of implementation. If the project can be delivered on-time and on-budget; if the proposer's project manager communicates frequently and effectively; and if the delivered system and ongoing support are meeting GoTriangle's needs, then the physical location of the developers is not important to us.*
22	Question: Is there a length of time for the contract? Should we be bidding for 1 yr., 2 yr. or 5 year contract for the maintenance piece? *Answer:* *The contract will be for 3-years with (2) one-year options. Please refer to Attachment K.*
23	Question: Is there a minority goal for this project? *Answer:* *There is not a minority or DBE goal set for this project.*
24	Question: In the RFP, you listed a number of canned or standard reports to have at Go-Live along with the ability to create Adhoc reports at a user level. The ones you have listed, can we take that as the number you are looking for to have at Go-Live and then maintenance wise we would produce other reports you may need? There are a number data sources Attachment L that have measures on them and how they are to be computed and you give some examples in Exhibit A of how you would like the data to look and other reporting requirements in it. It is nicely laid out, my question is are there others we need to consider as we

	pricing out the level of effort as create these reports? If you can, please provide an example of what you would like the report to look like. *Answer:* *Refer to Answer 7 and Attachment A.*
25	Question: Do you have an established budget for this project? *Answer:* *Yes.*
26	Question: Your RFP states that the database where consolidated data is housed must be ODBC compliant to allow access for existing and future reporting platforms. Is this an absolute requirement, or are you open to exploring platforms that provide end-to-end services, with their own visualization platforms. (In other words, does your data absolutely need to be portable and accessible by external tools?) *Answer:* *Consolidated data absolutely must be portable and accessible by external tools. This is non-negotiable. However, ODBC is not the only possible method of access which would meet our requirements. An alternative API for accessing the data stored in the database would be acceptable.*
27	Question: Would it be possible to obtain approximate sizes of the data sources listed in Attachment L? *Answer:* *No. While we are almost certain that the total size of the databases would be less than one terabyte per fiscal year, we do not have direct access to the databases for many of these sources.*
28	Question: In the case of a hosted (off-site) solution, is your expectation that the vendor configures and maintains the so-called aggregate server, or is this something that your tech team will maintain? *Answer:* *Our expectation is that the vendor shall configure and maintain the aggregate server in a hosted (off-site) solution and provide GoTriangle with a pricing model for all maintenance, support, and scalability.*

29	Question: To what extent are traditional "reports" expected versus more modern dashboards and/or data exploration tools? Traditional reports include tables of information, whereas data exploration tools would allow for more dynamic usage of the data in your various sources. Do you have a preference for one over the other? *Answer:* *Our ideal is to have a system that provides data exploration tools and export functionality so that we can share performance reports with many federal, state, and local government stakeholders in multiple formats. While we understand the power of dynamic usage of our data, we are required to provide information in static formats for some audiences.*
30.	***Add the following language Section 3.1 Contents of Submittal on page 10 of the RFP, after h. Technical Information:*** **Proposer's Anticipated Schedule** The Proposer's estimate of time required to complete each of the tasks described in the Scope of Work shall be considered in the selection process. The Proposer shall include a chart showing the anticipated schedule with appropriate milestone submittals based on the Scope of Work. The tasks included in the Scope of Work and any other tasks which the Proposer deems necessary or desirable shall be included as well as provisions for staff review. The schedule shall be formatted on 11" x 17" pages, (single-sided sheets) and shall be bound along with the letter size sheets in the submission.
31.	***Add the following language Section 3.6 Evaluation Criterion on page 16 of the RFP, after h. Technical Information:*** **Proposer's Anticipated Schedule**

End of Addendum

Attachment

NTD Monthly Report

Applies to all agencies and NTD modes.

Report parameters:

- Agency (one or more)
- NTD mode (one or more)
- Month (one or more)

Measures included in report:

- Unlinked passenger trips
- Vehicle hours
- Vehicle miles
- Vehicles operated in maximum service

Row hierarchy: Month (with total).

Column hierarchy: Agency, NTD type (DO, PT), NTD mode, measure.

OpStats Report

Applies to all agencies and NTD modes.

Report parameters:

- Fiscal year (one)
- Agency (one)
- NTD mode (one)

Measures included in report:

- Days of service operated
- Vehicles operated in AM/PM peak service
- Vehicles operated in midday service
- Unlinked passenger trips
- Revenue miles
- Revenue hours

Row hierarchy: Day type (Weekday, Saturday, Sunday, total), measure.

Column hierarchy: Time period (months, then quarters, then total).

Bus Operations KPI Report

Applies to all agencies, MB mode/mode-independent measures only.

Report parameters:

- Agency (one or more)
- Month (one or more)

Measures included in report:

- Unlinked passenger trips
- Revenue hours
- Deadhead hours
- Daily average passenger trips (Weekday)
- Daily average passenger trips (Saturday)
- Daily average passenger trips (Sunday)
- Verified complaints per 100,000 passengers
- Commendations
- On-time performance
- Preventable collisions per 100,000 miles
- Major mechanical failures
- Fleet availability
- PM's completed on time
- Miles per major mechanical failure

Row hierarchy: Measure.

Column hierarchy: Month, agency.

Total Service and Ridership Report

Applies to all agencies, all modes.

Report parameters:

- Agency (one)
- NTD mode (one or more)
- Route (one or more, or "all" – only applies to MB)
- Time period (any continuous set of days)

Measures included in report:

- Unlinked passenger trips
- Revenue hours
- Revenue miles
- Vehicle hours
- Vehicle miles
- Days of service operated
- Average trip length
- Passenger miles traveled
- Passengers per hour
- Passengers per mile

Row hierarchy: NTD mode, day type (subtotal, then weekday, Saturday, Sunday), NTD type (DO, PT, subtotal), route (for MB mode, with subtotal).

Column hierarchy: Measure.

Route Performance Report

Applies to all agencies, MB mode only.

Report parameters:

- Agency (one)
- Route (one or more, or "all")
- Time period (any continuous set of days)

Measures included in report:

- Daily average passenger trips
- Daily average revenue hours
- Daily average revenue miles
- Daily average vehicle hours
- Daily average vehicle miles
- Days of service operated
- Average trip length
- Daily average passenger miles traveled
- Passengers per hour
- Passengers per mile
- On-time performance (%)
- On-time arrivals at Durham Station (%) (where applicable)
- Trips with maximum load over vehicle's rated capacity (%)

Row hierarchy: Day type, NTD type (DO, PT, subtotal), route (with subtotal).

Column hierarchy: Measure.

Trip Performance Report

Applies to all agencies, MB mode only.

Report parameters:

- Agency (one)
- Route (one or more)
- Day type (one or more)
- Time period (any continuous set of days)

Measures included in report:

- Daily average passenger trips
- Daily average passenger miles traveled
- Days of service operated
- Passenger trips per revenue hour
- On-time performance (%)
- On-time arrivals at Durham Station (%) (where applicable)
- Trips with maximum load over vehicle's rated capacity (%)

Row hierarchy: Route, day type, trip (with subtotal).

Column hierarchy: Measure.

Daily Stop Usage Report

Applies to all agencies, MB mode only.

Report parameters:

- Agency (one or more)
- Route (one or more, or "all")
- Day type (one or more, or "all")
- Include usage by route (yes or no)
- Time period (any continuous set of days)

Measures to include:

- Average passenger boardings.
- Average passenger alightings.

Row hierarchy, when "include usage by route" is selected: Stop, day type, agency (with subtotal), route.

Row hierarchy, when "include usage by route" is not selected: Stop, day type.

Identifying information for each stop: ID, name.

Column hierarchy: Measure.

Call Center Performance Report

Report parameters:

- Time period (any continuous set of days)

Measures to include, as whole-department statistics:

- Calls received
- Calls answered
- Calls abandoned
- Average weekday call volume
- Average weekly call volume
- Calls answered
- Calls answered within 1 minute (%)
- Average call length
- Average wait time

Measures to include, by agency:

- Passenger complaints
- Passenger commendations
- Passenger comments

GO▶ Triangle

SIGN IN SHEET
FOR PRE-BID CONFERENCES, PRE-PROPOSAL CONFERENCES, BID OPENINGS

IFB OR RFP NUMBER: 17-071   GRANT NUMBER: _____   PAGE 1 ___ OF ___

DATE: 10/12/2017 ___   PROJECT TITLE: Business Intelligence System

_____ PRE-BID   XXXX PRE-PROPOSAL   _____ BID OPENING   _____ WALK THROUGH

ATTENDANCE LIST

NAME	FIRM REPRESENTED	ADDRESS	CITY/STATE/ZIP	TELEPHONE	FAX NUMBER	E-MAIL ADDRESS
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