2020

Proposal Prepared for the City of Hudson

Prepared by:
Research Analytics Consulting
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Research Analytics Consulting (RAC) is pleased to submit this proposal to the City Hudson, Ohio, to assist in the development, implementation, compilation, and analysis of a statistically significant random community survey to identify the community's ideas and priorities for the future development of a vacant 20-acre property that is owned by the city.

Consultant Information

The founder of this small consulting company, Dr. Cindy M. Walker, has over 20 years of experience teaching quantitative research methodologies to graduate students in the social sciences and conducting independent research. Since this is a quantitative project, Dr. Walker will be the consultant assigned to this project. This is a home-based business located at 939 Savannah Ave., in Pittsburgh, PA, which is where the work will be completed.

History, Mission, and Organizational Structure

Research Analytics Consulting (RAC) is a woman owned company with two primary consultants – one who focuses on quantitative research methods one who focuses on qualitative research methods. The mission of the company is to help clients meet their strategic goals through the development of data collection tools, such as tests and surveys; analysis of data; and interpretation of findings from the data analyzed. Prior to starting RAC, Dr. Walker was a Professor of Educational Psychology and the Director of the Consulting Office for Research and Evaluation (CORE) for the University of Wisconsin System. As a professor, she taught courses in survey development, psychometrics, measurement, assessment, program evaluation, statistics, and research design. As the Director of CORE, she worked on many different research analytic projects for external clients from a variety of industries. These experiences helped her learn how to simplify complex ideas so that they are more easily understood. To date she has worked on hundreds of research analytic projects for a wide variety of industries including large school districts, higher education, governmental agencies, healthcare, non-profit organizations, and industry. Many of these projects were multi-year studies funded by large federal or state grants. Dr. Walker has published numerous articles in the area of psychometrics and has co-authored a textbook entitled Categorical Data Analysis for the Social Sciences. She earned a PhD in Quantitative and Evaluative Research Methodologies from the University of Illinois at Urbana-Champaign, a MS in Mathematics from Illinois State University, and a BS in Mathematics and Computer Science, from Roosevelt University. For more information about the work that Dr. Walker had done throughout the years please see her vita which was provided as a separate attachment with the submission of this proposal.

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Our Approach & Scope of Work

In general, the approach taken by RAC is one of genuine collaboration. We approach each new project as a learner and treat each new client as a true partner, serving as members of your project management team to ensure that your needs are met.

What follows is a detailed description of the proposed work to be conducted for the city of Hudson Ohio.

Survey Development

It is essential that we work closely together, at the onset of the project, to ensure that the survey that is developed meets the needs of the city of Hudson. Previous experience designing tests and surveys in a collaborative manner include:

- Working with the Department of Public Instruction in the State of Wisconsin to develop a survey to send to a random representative set of school districts across the state to determine how schools were implementing the new federal guidelines for identifying students as having specific learning disabilities.
- Working with non-profits across the country that help youth become more aware of the risks associated with being sexually active and prevent teen pregnancies to design the evaluation design, including developing surveys and other data collection tools, analyze the data collected, and report the findings, to measure the impact of those programs.
- Working with as the local evaluator for several non-profits across the country that provide programs to support healthy relationships and promote responsible fatherhood to design the evaluation design, including developing surveys and other data collection tools, analyze the data collected, and report the findings, to measure the impact of those programs.

As requested, no less than four kick-off meetings will be held with elected officials and administrative staff. In these meetings we will facilitate in-depth discussion about the information that the city hopes to acquire by collecting this data and how this information will be used. These meetings will be iterative and connected, such that in between meetings we are working to enact the vision of the city so that we are ready to share tangible ideas in follow-up meetings, for your review and consideration.

In the development of this survey we will work to ensure that homeowners do not feel it is onerous to take the survey. This is accomplished by making sure there are not too many, if any, open-ended items on the survey. This can be done by coming up with the most likely responses homeowners might have to the questions posed and then using those ideas to create multiple-choice type survey items. A textbox can be used as a response option for any question, should the city desire, so that homeowners may write in a response that was not provided as an option. Ensuring that completing the survey is not burdensome for homeowners is also

accomplished by ensuring that the language of survey items is not too complex. Finally, it is accomplished by utilizing theoretical item writing rules that are based in the field of survey development and psychometrics.

To ensure that the sample is representative of the four Council wards of the city, the spreadsheet that is provided by the city, that contains all current property owners and their respective wards, will be used. This spreadsheet will be sorted by ward. Then, within each ward, each property owner will be assigned a random number, taken from a uniform distribution (which has numbers that range from 0 to 1). Since there are four wards in the city, home owners that are assigned a random number that is less than or equal to 0.25 in each of the four wards will be chosen as the sample that is representative of the four council wards within the city. This strategy assumes that there are an equal number of homeowners within each ward, which is likely not the case. This issue is discussed in greater detail in a later section of this proposal.

While it is clear that the city wants representation of each of the four wards, it is unclear if there are other demographic variables that need to be considered in choosing the sample, such as age, race, gender, level of education, etc. This will be discussed in one of the kick-off meetings to ensure that the sample is representative of homeowners in the city of Hudson, Ohio. If there are other demographics of interest, for which the city has data, these can also be considered in the selection of the sample to ensure that the sample is representative of the population of homeowners in Hudson, Ohio. In any case, the survey will include items pertaining to demographic variables that are of interest to the city, including ward.

Survey Implementation/Administration

Although the city does not have e-mail addresses for homeowners, we propose collaborating in one of our first kick-off meetings to come up with a feasible plan to administer the surveys electronically. This will be the most inexpensive and efficient way to collect data because it does not require the mailing of paper surveys, the burden of having respondents return paper surveys, and the data entry associated with the administration of paper surveys.

One way that this could be accomplished is to have the city send postcards, or letters, to the sample of homeowners that are selected for data collection. We propose that the city reach out to homeowners, as opposed to RAC, because people are more likely to respond to surveys if they come from a trusted and known source. In addition, although the average response rate is 30%, response rates can vary anywhere between about 5% and 85%. Therefore, we propose that the city reaches out to homeowners selected in the sampling framework so that we achieve an adequate response rate. This, in turn, will help to ensure that the results obtained are at the level of generalizability requested by the city, with 95% confidence and a 5% margin of error. If the city has an external consultant mail surveys to homeowners, then it is likely that the response rate will be at the lower end of the spectrum. We say this based on research and

experience. For example, when working with the State of Wisconsin, it was extremely beneficial that the request to fill out the survey came from the Department of Public Instruction, as opposed to coming from the research team, with respect to obtaining an adequate response rate. With this approach we achieved a response rate of 70%.

This postcard or letter would briefly describe why the city is interested in the opinions of homeowners and that the research project is being done in collaboration with RAC. It would also provide a short and simple link to the survey. It is also recommended that the city offer an incentive for participation. For example, a random drawing could be conducted for all who respond to the survey and provide their contact information, to select 3 to 5 homeowners who will receive gift certificates to shop in one of the local businesses in Hudson, Ohio. This incentive would also be clearly stated on the postcard, to encourage homeowners to respond to the survey. To ensure that homeowners are aware of the project the city is taking on, a marketing plan could be designed to promote taking the survey. For example, the city could advertise on Next Door Neighbor and in the local newspaper.

To ensure a statistically significant sample, with a 95% confidence level and a 5% margin of error, Cochran's formula can be used. Using this formula and a standard deviation of 0.5 (which assumes maximum variability for yes/no survey questions and is a parameter that can be changed in the model, should it be desired), and correcting for the fact that there is a finite population of 22,285 in Hudson, Ohio, the necessary sample size is 378. Therefore, if 1,600 homeowners are asked to take this survey the expected response rate is approximately 480, assuming we achieve the average response rate of 30%. This is slightly greater than required, which implies we can obtain a statistically significant sample with a response rate that is slightly below the average. However, this is only an estimate and a more accurate estimate can be obtained using the number of homeowners in each ward, particularly if the number of homeowners in each ward are not equivalent. In fact, this should be discussed at one of the kick-off meetings because if the number of homeowners in each ward are not equivalent then selecting an equivalent number of homeowners from each ward is not the ideal approach. Rather, the sampling framework should be weighted, by ward. Therefore, this is a topic for discussion.

While the city has proposed selecting a random sample for survey administration, if an electronic survey is used for data collection, it is possible to ask all homeowners to complete the survey. This would help to increase the response rate and could result in a sample that is just as representative, if not more so, than selecting homeowners from a sampling framework. This possibility, and the ramification of surveying all homeowners as opposed to a sample, is also a topic for discussion that should also be discussed at one of the kick-off meetings.

If the survey is conducted electronically, it will be hosted on RAC's SurveyMonkey account which will ensure that the data is secure. This web-based survey tool collects IP addresses from

respondents which can be used to eliminate duplicate responses. This tool also allows skip-logic to be built into the survey, should it be needed.

We propose that a clear deadline is set for responding to the survey. RAC will monitor data collection to ensure we achieve an adequate response rate, by keeping track of the number of homeowners that fill out the survey. At the close of the survey, should the response rate be lower than what is required, we propose sending one final reminder to homeowners selected to be in the sample. After the survey has closed, the data set will be downloaded. The first step in the analysis phase of the project will be to clean the data. During this phase duplicate responses (if any) will be deleted, as will non-helpful responses (such as someone who completed only the demographic section of the survey). Cases that are eliminated for any reason will be described in the final report, with respect to any demographic data that has been collected for that homeowner, to determine if there are any patterns that might bias the results.

Analysis of Results

After the data is cleaned, the results will be analyzed using a statistical software package such as SPSS, SAS, or R. The analyses that are conducted will be based on the survey that is developed. However, a description of the sample is extremely important for this project, with respect to the demographics that have been deemed important. Therefore, the percentage of homeowners within each demographic variable will be calculated. In addition, frequency tables for each survey item, that depict the number and percent of homeowners that have selected each of the survey response options, will be created. Statistical analyses can be conducted, if desired, to determine if there are statistically significant differences in the opinions expressed by homeowners based on any of the demographic variables, such as gender, ward, and age-group. If qualitative items are included on the survey then they will be analyzed by coding each response with a theme, which will be explicitly defined in the final report. Once themes have been developed the percentage of respondents that were coded within a theme will be calculated.

Final Report

A final report will be prepared by RAC that includes the response rate, overall and by ward; a description of the sample; numeric and/or graphic frequency tables for all survey items, and any statistical analyses that were conducted, as well as an analysis of any open-ended survey items. RAC will also provide the city of Hudson with the actual comments provided by homeowners, as an Appendix to the final report.

These results will be explained in detail in the final report and will be summarized in an executive summary. This report will be presented, as requested, in a minimum of four final meetings with the city. This report will not be finalized until the city is satisfied that all

questions that can be answered by the data have been answered. Examples of previous reports that have been prepared for clients have been provided as part of this application.

Previous Work in Hudson, Ohio

RAC has not done any previous work in the City of Hudson, Ohio. However, we have worked with the US Department of Education and the WI Department of Public Instruction. RAC has also worked with the National Science Foundation, US Department of Health and Human Services, and Milwaukee Public School District. Much of this work was conducted I

Primary Manager of the Project

As previously stated, Dr. Cindy Walker, President and CEO of RAC will serve as the project manager for this project. No other staff members will be assigned to this project unless it is decided that qualitative work, such as focus groups or interviews, will be conducted as part of this project, such as focus groups or interviews, which seems unlikely given the scope of the proposed project.

Statement of Litigation, Arbitration, or Bankruptcy

Neither RAC, nor any consultants associated with RAC. have been involved in any material litigation, arbitration, or bankruptcy proceeding within the last three calendar years.

Examples of Data, Reports, Etc.

The best way to describe the types of data that we have worked with and the final reports that have been written is to share the final reports with you. However, these reports are the property of the clients for whom they were prepared and must be kept confidential. Therefore, to share them with the city we will provide Thom Sheridan with access to a file folder with these reports.

Budget

The hourly rate charged, including taxes and fringe benefits, is $275 per hour and the total estimated budget for this project is approximately $13,000. Table 1 illustrates the estimated time associated with each proposed task, as well as some minor additional costs. Please note that this is only an estimate. The actual cost may be less and is guaranteed to not exceed $15,000.

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Table 1: Proposed Budget

Budget Item	Estimated Hours	Cost
Work with City Officials	16	$4,400
Develop Survey	4	$1,100
Create Electronic Survey	4	$1,100
Monitor Implementation	6	$1,650
Clean and Analyze Data	8	$2.200
Write Final Report	8	$2,200
Total Hours	**46**	**$12,650**
	Additional Costs	**$500**
	Total Estimated Cost	**$13,150**

Total Estimated Cost is $13,150; Not-to-Exceed $15,000

Budget Detail

- **Work with City Officials**
  The RFP requests a minimum of 4 kick-off meetings and 4 final meetings. Each meeting has been budgeted for one hour and an additional eight hours have been budgeted for additional meetings and other communications with the project manager and other city officials.
- **Develop and Refine Surveys**
  Four hours have been budgeted to work on refining and developing the survey after each of the four kick-off meetings.
- **Create Online Surveys**
  Four hours have been budgeted to take the final approved survey and transfer it to an on-line platform.
- **Monitor Implementation**
  Six hours have been budgeted to monitor the data that is being collected and to report response rates, by ward, to the city. It is envisioned that this will occur on Monday, Wednesday, and Friday for the two weeks that the survey is open.
- **Clean and Analyze Data**
  Eight hours have been budgeted to prepare the data for analysis and analyze the data.
- **Write Final Report**
  Eight hours have been budgeted to prepare a final report that is acceptable to the city for distribution.
- **Additional Costs**
  Additional costs have been allocated for hosting the electronic survey and miscellaneous office supplies.

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Timeline

Figure 1, on the following page, depicts a Gantt chart illustrating the proposed timeline for this project. As the figure indicates, it is proposed that this project be completed within two months, as required by the city.

Positive Impact on the city of Hudson, Ohio

Collecting survey data from homeowners in the city of Hudson, Ohio, is an excellent way to ensure that the city is moving forward with this development project in the way that the majority of taxpayers would prefer.

Figure 1: Gantt Chart Reflecting Timeline for Project

City of Hudson Downtown Development Survey

Project Start: 1/15/2021

Display Week: 2

TASK	START	END
Kick-off Meetings		
Meeting #1	1/20/21	1/20/21
Meeting #2	1/25/21	1/25/21
Meeting #3	1/28/21	1/28/21
Meeting #4	2/1/21	2/1/21
Survey Develoment		
Develop Survey	1/18/21	2/1/21
Create Electronic Survey	2/2/21	2/7/21
Survey Implementation	2/8/21	2/21/21
Data Analysis		
Clean data, create codebooks, label variabl	2/22/21	2/26/21
Analyze Data	2/22/21	2/26/21
Results		
Write Final Report	3/1/21	3/7/21
Present Final Report	3/8/21	3/13/21