



MEMORANDUM

**TO:** Phillipa Guthrie  
**FROM:** Rick Dietz, Director, ITS  
**DATE:** 12/20/2019  
**RE:** Amendment to CTC Consulting Contract

Columbia Telecommunications  
Corp.

**Funding Source:** ITS General Fund Mgt. Fee, Consultants and Workshops  
101-28-280000-53170

**Total Dollar Amount of Contract:** \$90,000, originally. \$60,262.12 remain encumbered to CTC for consulting services.

**Expiration Date of Contract:** Extends contract to continue until terminated by one or both of the parties pursuant to Article 12 of the original contract.

**Department Head Initials of Approval:** RBD

**Due Date For Signature:** ASAP

19-748

**Record Destruction Date (Legal Dept to fill in):**

TBD

**PREVIOUSLY REVIEWED BY & RETURN SIGNED CONTRACT TO THIS ATTORNEY:**

Barbara McKinney

**ATTORNEY IS TO RETURN SIGNED CONTRACT TO THIS DEPARTMENTAL EMPLOYEE:**

Rick Dietz

**Summary of Contract:**

On Feb 1, 2016 the City and CTC entered a contract for services in support of the City's goals to secure ubiquitous fiber-optic high-speed internet access throughout our community. This continues to be a high priority goal for the City and the need for CTC's support, expertise and services continues. The purpose of this addendum is to extend the CTC contract for consulting services to allow the City to continue working with CTC. It also updates the contract deliverables to include preparing a Digital Inclusion Strategic Plan in 2020.

CTC will provide an analysis of gaps affecting the City's low-income or otherwise disadvantaged population in use of broadband internet services. The purpose of this analysis is to help the City better understand these gaps, including those relating to broadband access, affordability, digital skills and device ownership, that may be preventing all citizens from making the most effective and meaningful use of broadband internet services. Based on the analysis, CTC will then develop an action plan of steps that can be taken by both public and private sectors to close those gaps.

Addendum  
to February 1, 2016 Agreement  
between the  
CITY OF BLOOMINGTON  
and  
CTC TECHNOLOGY AND ENERGY

WHEREAS, the City of Bloomington [hereinafter City] and CTC Technology and Energy [hereinafter CTC] entered into an Agreement on February 1, 2016, [hereinafter Agreement] for CTC to provide fiber consulting services to the City; and

WHEREAS, the Agreement expires on December 31, 2019, and the parties would like to renew and continue the Agreement and expand the services required; and

WHEREAS, CTC has the expertise and staff to provide these services,

NOW, THEREFORE, the City and CTC agree to the following:

The Agreement is continued under its original terms and with the following additional terms:

The Agreement will continue until terminated by one or both of the parties pursuant to Article 12 of the Agreement.

In addition to the services provided pursuant to the Agreement, CTC agrees to assist the City to develop a Digital Equity Strategic Plan. CTC will provide an analysis of gaps affecting the City's low-income or otherwise disadvantaged population in use of broadband internet services. The purpose of this analysis is to help the City better understand these gaps, including those relating to broadband access, affordability, digital skills and device ownership, that may be preventing all citizens from making the most effective and meaningful use of broadband internet services. Based on the analysis, CTC will then develop an action plan of steps that can be taken by both public and private sectors to close those gaps.

CTC will complete its analysis by no later than June 31, 2020 and will complete its action plan by no later than December 31, 2020.

All other terms and conditions of the Agreement continue unchanged.

In witness of acceptance of all conditions contained in this Addendum and in the Agreement, the parties execute this Addendum on \_\_\_\_\_, 2019.

CITY OF BLOOMINGTON

Addendum  
to February 1, 2016 Agreement  
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CITY OF BLOOMINGTON

BY: Phillippa M. Guthrie  
John Hamilton, Mayor

12-31-19  
DATE

CTC TECHNOLOGY AND ENERGY

BY: Joanne S. Hovis  
Joanne S. Hovis, President

12/30/2019  
DATE

CITY OF BLOOMINGTON  
Legal Department  
Reviewed By: BEM  
DATE: 12/30/19

BY: \_\_\_\_\_

John Hamilton, Mayor

DATE

CTC TECHNOLOGY AND ENERGY

BY: \_\_\_\_\_

Joanne S. Hovis, President

DATE

CITY OF BLOOMINGTON  
Legal Department  
Reviewed By: BEA  
DATE: 12/30/19

CITY OF BLOOMINGTON  
Controller  
Reviewed by: [Signature]  
DATE: 12-30-19  
FUND, ACCT: 101-28-52170

# ctc technology & energy

engineering & business consulting

December 4, 2019

Mr. Rick Dietz  
Director, Information & Technology Services Dept.  
City of Bloomington, Indiana  
401 N. Morton St., Suite 160  
Bloomington, IN 47404  
Via email: [dietzr@bloomington.in.gov](mailto:dietzr@bloomington.in.gov)

*Subject: Amended proposal to analyze broadband gaps affecting the City's disadvantaged population and develop a strategic plan for mitigating those gaps*

Dear Rick:

CTC Technology & Energy would be pleased to support the City of Bloomington with a study and analysis of gaps affecting the City's low-income or otherwise disadvantaged population in use of the broadband internet. The proposal below incorporates refinements from the revised version we sent you in September 2018. This new version will serve as the basis for our engagement.

Our goal will be to help the City better understand the gaps—including those related to broadband access, affordability, digital skills, and device ownership—that may be preventing all citizens from making the most effective, meaningful use of broadband. Based on the research and data gathered, we will then develop an actionable plan of steps that can be taken by both public and private sectors to address those challenges.

### ***Types of Data to Be Collected***

Our methodology is designed to enable the City to understand digital challenges in Bloomington so as to develop an actionable plan to address those challenges.

Digital inclusion research is a new and emerging field, but most researchers agree that broadband use disparities tend to result from a combination of three factors: (1) lack of access to affordable broadband service; (2) lack of access to usable, broadband-enabled devices; and (3) lack of knowledge (or "literacy") of how to use the internet in ways that are meaningful or valuable to the user.

This recommended methodology is designed to enable collection of data that will illuminate to what degree these factors are present in Bloomington, how they relate to each other, and how they can be alleviated through targeted strategies designed to provide (1) service access; (2) devices; and (3) training and support.

**Columbia Telecommunications Corporation**

10613 Concord Street • Kensington, MD 20895 • Tel: 301-933-1488 • Fax: 301-933-3340 • [www.ctcnet.us](http://www.ctcnet.us)

To that end, we recommend below multiple means to collect the following types of data:

1. Broadband service availability, pricing, and competition
2. Broadband adoption rates and patterns
3. Means by which community members access the internet (e.g., wireline and/or mobile) and the reasons for that choice or outcome
4. Use of broadband subsidy programs such as AT&T's Access program, Comcast's Internet Essentials, and the FCC's Lifeline program
5. Access to broadband-enabled devices, knowledge of how to use those devices, and challenges with use (for example, viruses, maintenance costs, etc.)
6. Broadband "literacy," or challenges with knowledge of how to use the internet in ways that the user finds meaningful, useful, and safe
7. Need for foreign language or culturally specific training to develop knowledge of how to use the internet

***Summary of Methodology for Data Collection***

In summary, the recommended methodology includes the following general categories of research:

- Mail-based, Scientific Survey
  - Perform a mail-based survey of a sample of the entire City population to provide a benchmark on basic questions related to internet access and usage, against which data from the relevant population will be compared.
  - We recommend a statistically valid survey that can provide a baseline for measuring changes going forward, including the impact of City efforts and interventions.
  - The survey will be designed to gather data on barriers to accessing and using broadband, computers and other devices, and online resources. The questions will also be designed to understand what kinds of training might be helpful, and if there exist language or cultural barriers to digital learning.
  - The survey will seek to gather data on use by City residents of the AT&T Access program, Internet Essentials service from Comcast, and the FCC's Lifeline subsidy for broadband service.

- The survey will also seek to gather data about the needs of school-age children and their families by adding or enhancing questions on a range of relevant topics. (In recent engagements, we have found that approximately one-third of respondents to residential surveys are from households with school-age children.)
  - Before finalizing the survey instrument, we will iterate on drafts with the City and with our survey expert to ensure that it has the best chance of capturing useful data.
- Community Meetings
    - Work with the City to hold discussion groups with diverse segments of the City's population, focused on those groups the City seeks to support with this initiative.
    - The purpose of these discussions will be to learn about the digital challenges faced by various demographic and income groups, and to gather anecdotal data for the study.

Our proposed methodology reflects best practices with respect to how pioneering cities have gathered data on questions of digital equity, including on how they went about seeking insights from city residents. These cities include Austin, Texas; Portland, Oregon; and Seattle, Washington.

**Task 1: Conduct a Mail-Based, Scientific Survey**

We will perform a mail-based survey of samples of the City population to provide a benchmark on basic questions related to internet access and usage. This statistically valid survey approach can both potentially identify problems for which targeted City interventions might be appropriate, and also provide a baseline for measuring changes going forward, including the impact of City efforts.

The mail survey will be designed to gather data on barriers to accessing and using broadband, computers and other devices, and online resources. We will include questions about whether the respondent uses a subsidized internet access service. The questions will also be designed to understand what kinds of training might be helpful, and if there exist language or cultural barriers to digital learning.

Using a mailing list we will purchase from the data provider we frequently use, InfoUSA, we will mail surveys to two sets of randomly selected residents:

1. A group whose income falls below an amount we collaboratively select with the City, and who are older than age 26 (to seek to exclude undergraduate and graduate students from the sample, so as to focus on non-student, low-income households)
2. A randomly selected second group with no income-level element in sampling.

This approach is designed to enable statistically meaningful comparison between the general population and the lower-income community.

We will mail 4,000 surveys to the first group and 2,530 to the second (estimating that the rate of return will be 10 percent for the first group and 16 percent for the second). This number of mailings would hopefully result in 400 responses from each group, to yield a 95 percent confidence level with a 5 percent confidence interval, thus enabling us to do cross-tabulations and subdivision within each group to support more granular analysis (such as, for example, to understand the relationship between adoption and family size within each group).

The survey will require an estimated 10 minutes to complete. To encourage participation, the survey will be printed as a booklet (which enhances readability) and mailed in a non-standard sized envelope (which increases the likelihood that it will be noticed and opened by the recipients). We will manage all aspects of survey distribution, return mailing, processing, and data analysis.

Survey responses will be entered into a database format and analyzed. The raw data will be reviewed and processed following our standard data-cleaning protocol. This might include coding missing responses, establishing new response categories, verifying skip logic, and other steps necessary to ensure a clean and valid dataset.

Data analysis will include, at minimum, development of frequency tables for all responses and selected cross-tabulations and/or comparisons of mean ratings by geographic area and key demographics.

We will seek to identify key target segments by examining demographic, income, and other relevant drivers.

One key goal of this effort is to determine how many low-income Bloomington residents use subsidized internet access services, how many are eligible but not using the programs, and what barriers to awareness and adoption may exist that could be addressed through targeted interventions by the City.

As part of our final project deliverable, we will prepare a written summary that describes the survey process, results, and analysis. The report will include a detailed narrative analysis, supported by extensive tables and charts that illustrate the survey findings.

**Task 2: Facilitate Community Discussion Groups**

Working with the City, we will facilitate up to eight 90-minute discussion groups with diverse segments of the City's population, focused on those groups the City seeks to support with this initiative. The purpose of these discussions will be to learn about the digital challenges faced by various demographic and income groups. The information collected in these community meetings will provide insights into the challenges faced by different parts of the community.

For each community meeting, we assume that the City will identify and invite participants and will be responsible for managing meeting logistics (including by providing a suitable meeting location). We recommend a mix of meeting times (e.g., morning, afternoon, early evening). We assume, for the sake of judicious use of City resources, that the meetings will be held over a period of up to three sequential weekdays.

Initial questions for these group discussion meetings may include the following, which are designed to enable an open-ended discussion that enables the facilitator to follow up participant comments:

1. *If you and family members do not use the internet, why don't you use it?*
2. *Can you describe all the places where you and family members access the internet?*
3. *What are your and family members top reasons for using the internet?*
4. *Are you experiencing any problems with internet service?*
5. *Are you able to readily use websites for local government, banking, legal, and educational resources?*
6. *What is most important to you about using the internet?*
7. *If any assistance for using the internet were provided, what should it be?*
8. *If you are eligible, do you use a subsidized internet access service?*

Following the meetings, the findings and observations should be recorded and synthesized, and areas of commonality should be summarized.

**Task 3: Prepare Digital Inclusion Strategic Plan**

Our final deliverable will be a digital equity analysis report that summarizes our findings and recommends strategic approaches and roadmaps of concrete actions for the City's consideration.





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TBD

PREVIOUSLY REVIEWED BY & RETURN SIGNED CONTRACT TO THIS ATTORNEY:

Barbara McKinney

ATTORNEY IS TO RETURN SIGNED CONTRACT TO THIS DEPARTMENTAL EMPLOYEE:

18-727

Rick Dietz

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CITY OF BLOOMINGTON

BY: Philipa M. Guthrie

*John Hamilton*  
John Hamilton, Mayor

12-7-18

DATE

CTC TECHNOLOGY AND ENERGY

BY: Joanne S. Hovis

Joanne S. Hovis, President

12/11/18

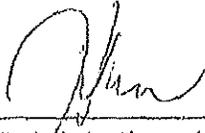
DATE

CITY OF BLOOMINGTON  
Legal Department  
Reviewed by: REN  
DATE: 12/3/18

CITY OF BLOOMINGTON  
Controller  
Reviewed by: [Signature]  
DATE: 12-5-18  
FUND/ACCT: 121-18-53120  
2016 Fund



HELEN VESKE  
Notary Public - Maryland  
Montgomery County  
My Commission Expires  
January 02, 2022



Notary Public's Signature

My commission expires: 1/2/22

Helen Veske

Printed name of Notary Public

County of Residence: Montgomery



Printed name of Notary Public