

TOPEKA/SHAWNEE COUNTY JOINT ECONOMIC DEVELOPMENT ORGANIZATION

JEDO CONTRACT NO. C-⁰²____-2017

AGREEMENT

THIS AGREEMENT is entered into this 26th day of JULY, 2017, by and between the Topeka/Shawnee County Joint Economic Development Organization, hereinafter referred to as "JEDO" and Tilson Technology Management, hereinafter referred to as "Consultant."

WHEREAS, JEDO desires to retain a professional consulting firm to provide broadband consulting services; and

WHEREAS, the City of Topeka solicited requests for proposals (RFP) on behalf of JEDO for said broadband consulting services; and

WHEREAS, Consultant submitted a proposal which JEDO has selected.

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS CONTAINED HEREIN, THE PARTIES AGREE AS FOLLOWS:

1. Services. Consultant agrees to provide broadband consulting services for JEDO. The services shall be in conformance with the terms of this Agreement, the JEDO Scope of Services, which is attached herein as Exhibit A and incorporated by reference and Consultant's Proposal which is attached herein as Exhibit B and incorporated by reference ("the Project Proposal"). If the terms of this Agreement conflict with the term in Exhibits A and B, the terms of this Agreement shall control.

2. Project Schedule and Timeline. Consultant shall follow the schedule and timeline identified on Page 48 of the Project Proposal which is approximately 16 months from the date of execution of this Agreement.

3. Fees; Payment Schedule. JEDO will be billed by invoice for professional time and services provided by Consultant in an amount not to exceed two hundred five thousand two hundred fifteen dollars (\$205,215.00). Consultant shall submit monthly invoices that will be commensurate with project milestones completed within each said monthly billing period as detailed in Exhibit C ("Pricing Proposal") which is attached herein and incorporated by reference. If desired by JEDO, the optional high-level fiber design and cost estimate shall be made a part of this Agreement by an amendment agreed to in writing by the parties in an amount not to exceed twenty eight thousand dollars (\$28,000.00).

4. All invoices will be submitted to JEDO Finance Officer, Nickie Lee, City of Topeka, 215 SE 7th Street, Topeka, KS 66603. Upon approval by the JEDO Finance Committee, payment will be made to Consultant.

5. Independent Contractor. Both parties shall act in their individual capacities and not as agents, employees, partners, or associates of the other. Consultant accepts responsibility for payment of unemployment insurance, workers' compensation and any taxes or payroll deductions required by law for Consultant's employees engaged in the project.

6. Records. Consultant agrees to preserve and make available to JEDO, upon request, all documents and records related to this Agreement for a period of five years from date of final execution by the parties.

7. Modification; Choice of Law. This Agreement may be modified only by written agreement of the parties. The Agreement shall be governed by the laws of the State

of Kansas. Venue for any litigation will be in the district court of Shawnee County, Kansas or the U.S. District Court for the State of Kansas in Topeka, Kansas.

8. Termination for Cause. This Agreement may be terminated by either party upon written notice in the event of material failure by the other party to perform in accordance with the terms of this Agreement. The non-performing party shall have ten calendar days from the date of the termination notice to cure or submit a plan for cure acceptable to the other party.

9. No Assignment. Neither JEDO nor Consultant shall assign any rights or duties under this Agreement without the prior written consent of the other party. Nothing contained herein shall prevent Consultant from employing independent consultants, associates, or subcontractors; however, in such case, Consultant shall be responsible for performance of the Services.

10. Indemnification. Consultant agrees to indemnify, defend, protect and hold JEDO and its agents harmless from all claims, losses, expenses, fees including reasonable attorney fees, costs, and judgments that may be asserted against JEDO and its agents that result from the Consultant's activities undertaken pursuant to this Agreement, and including activities undertaken by Consultant's employees, subcontractors, and any other of Consultant's agents.

11. Insurance. JEDO shall not be required to purchase any insurance against loss or damage for any property or service to which this Agreement relates. Consultant shall maintain on file with JEDO at all times during the duration of the agreement, including renewal periods, a current, valid Certificate of Insurance that provides Commercial General

Liability, Automobile Liability and Workers' Compensation in the following minimum amounts:

COMMERCIAL GENERAL LIABILITY

Per Occurrence \$1,000,000.00

General Aggregate \$2,000,000.00

AUTOMOBILE LIABILITY

Combined Single Limit \$1,000,000.00

12. Entire Agreement; No Third Party Beneficiaries. This Agreement and its exhibits represent the entire agreement of the parties and shall supersede all prior negotiations, representations, or agreements, written or oral, between the parties. This Agreement shall not be construed as providing any enforceable rights to any third party.

13. Notices. All notices, demands, requests or other communication shall be in writing and made by personal delivery or sent by U.S. mail, postage prepaid, or overnight delivery, addressed as follows:

For JEDO:

City Clerk
City of Topeka
215 SE 7th Street
Topeka, KS 66603

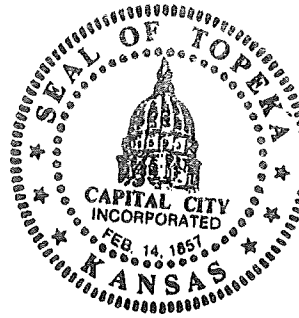
For Consultant:

Joshua Broder, CEO
Tilson Technology Management
245 Commercial Street
Portland, ME 04101

14. Execution in Counterparts. This Agreement may be signed by faxed or electronic signature, which shall be deemed to be an original signature. This Agreement

may be executed in counterparts, each of which shall be deemed to be an original, and all of which shall be deemed to constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have hereto executed this Agreement as of
the day and year first above written.



TOPEKA/SHAWNEE COUNTY JOINT
ECONOMIC DEVELOPMENT ORGANIZATION

Larry E. Wolgast
Mayor Larry Wolgast, JEDO Chairperson

ATTEST:

Brenda Younger
Brenda Younger, City Clerk

APPROVED AS TO FORM AND LEGALITY

DATE 1/27/17 BY MF

TILSON TECHNOLOGY MANAGEMENT

DocuSigned by:

6BC5E7221C6B4B2...

Joshua Broder, CEO

Jay Ford

Director, Government & Institutional Consulting

EXHIBIT A



Event # 1366-1

Name: Broadband Consulting Services

Reference: Broadband Consulting Services

Description: This Request for Proposal is a courtesy bid for the Topeka/Shawnee County Joint Economic Development Organization (JEDO). The intent is to solicit competitive proposals from qualified firms to provide Broadband Consulting Services as set forth in the scope of work.

Buyer: Jay Oyler

Status: Pending award

Event Type: RFP

Currency: USD

Category: PROFESSIONAL SERVICES

Sub Category: OTHER

Scaled Bid: Yes

Respond To All Lines: No

Q & A Allowed: Yes

Number Of Amendments: 1

Event Dates

Preview:

Q & A Open: 02/10/2017 01:36:00 PM

Open: 02/10/2017 01:35:00 PM

Q & A Close: 03/03/2017 12:00:00 PM

Close: 03/08/2017 02:00:00 PM

Dispute Close:

Terms And Conditions

General

Disclaimer

Disclaimer. The City of Topeka attempts to maintain continuous access to the supplier portal. However, from time to time, access may be interrupted or prevented due to maintenance, site problems, Internet problems, or problems experienced by the user due to the user's computer system. The City makes no warranties that the supplier portal will be uninterrupted or error-free. Regardless of the source of any problem, it is the user's responsibility to ensure that its bid is timely received. Because of the discrepancies inherent in timing mechanisms (e.g. cell phone, computers, mobile devices), the bid time will be determined based upon the time indicated on the City server for the Strategic Sourcing application. If the user does not submit its bid at or before the time indicated on the City server for the Strategic Sourcing application, the bid will be electronically rejected by the Strategic Sourcing application as untimely.

The City shall not be liable for any direct, indirect, incidental, special, consequential or exemplary damages, including but not limited to, damages for loss of profits, goodwill, use, data or other intangible losses resulting from: (i) the use or the inability to use the supplier portal; (ii) unauthorized access to or alteration of the user's transmissions or data; or (iii) any other matter relating to the supplier portal.

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Amendments to Bids: To ensure maximum access opportunities for users, events/solicitations shall typically be posted for a minimum of ten (10) days and no amendments shall typically be made within the last three days before the event/solicitation is due. Bidders/vendors are cautioned that the competitive nature of their offers could be affected if their submission does not include all amendments. For this reason bidders/vendors are advised to revisit all solicitations to which they intend to respond three (3) days prior to the due date. It is the bidder's/vendor's responsibility to check the website from time to time for updates to events/solicitations and to pick up additional addenda and information.

Standard Terms and Conditions

RFP Terms and Conditions

REQUEST FOR PROPOSAL (RFP) STANDARD TERMS AND CONDITIONS

1. READ ALL STANDARD TERMS AND CONDITIONS, SPECIAL TERMS AND CONDITIONS AND THE SCOPE OF WORK CAREFULLY. Failure to abide by all the conditions of this request may result in the rejection of a proposal. Inquiries about this request must be addressed during the open question and answer period. Proposals including attachments (proposal, drawings, photographs, etc.) shall be submitted through the City's online bidding portal.
2. SINGLE POINT OF CONTACT: The single point of contact for all inquiries, questions or requests shall be buyer or their designee initiating this RFP. All phone calls shall be directed to the buyer. No communication is to be had with any other City employee or JEDO member while the bidding event is open and until a contract and/or purchase order is awarded/issued. Bidders may have contact with JEDO officials during negotiations, contract signing or as otherwise specified in the RFP.
3. NEGOTIATED PROCUREMENT: JEDO reserves the right to negotiate this proposal. Final evaluation and award is made by the Negotiation Committee or their designees, which consists of the following:
Joint Economic Development Organization
4. APPEARANCE BEFORE COMMITTEE: Any, all or no bidders may be required to appear before the Committee to explain their understanding and approach to questions from the Committee concerning the proposal; or, the Committee may award to the low bidder without conducting negotiations. The Committee reserves the right to request additional information from bidders as needed. Bidders selected to participate in negotiations will be given an opportunity to submit a best and final offer to the Committee. Prior to the specified cut-off time for best and final offers, bidders may submit revisions to their technical and cost proposals. Bidders are prohibited from electronically recording these meetings. All information received prior to the cut-off time will be considered as part of the bidder's best and final offer. No additional revisions shall be made after the specified cut-off time unless requested by the Committee.
5. QUESTIONS/ADDENDA: It shall be the bidder's responsibility to monitor the City's bidding portal for answers to questions and any addenda issued that may alter or change the scope of the request. Failure to notify the buyer of any conflicts or ambiguities in this request may result in items being resolved in the best interest of the JEDO. Any and all binding modifications to this request shall be made by Addendum.
6. PRE-PROPOSAL CONFERENCE: All Pre-Proposal Conferences will be scheduled (if so noted) through the meetings section of the City's online bidding portal. Attendance is typically not mandatory, but is strongly encouraged. All questions shall be submitted during the open questions period section of the City's online bidding portal. At the Pre-Proposal Conference impromptu questions will be permitted and spontaneous unofficial answers will be provided, when possible. However, bidders should clearly understand that the only official answer or position of the JEDO will be by written amendment.
7. COST OF PREPARING PROPOSAL: The cost of developing and submitting the proposal is entirely the responsibility of the bidder. This includes costs to determine the nature of the engagement, preparation of the proposal, submitting the proposal, negotiating the contract and other costs associated with this request. All responses will become the property of the JEDO and are subject to the Kansas Open Records Act subsequent to the signing of a contract, purchase order issuance or rejection of all bids/responses.
8. EVALUATION OF PROPOSALS: Award shall be made through qualification based selection in the best interest of the City as determined by the Negotiating Committee. Consideration will focus on, but is not limited to:
 - Response format as required by this request;
 - Adequacy and completeness of proposal;
 - Bidder's understanding of the project/scope of work/services;
 - Compliance with the terms and conditions of the request;
 - Experience in providing like services;
 - Qualified staff;
 - Cost Bidders are cautioned not to inflate prices in the initial proposal as cost is a factor in determining who may receive an award or be invited to formal negotiations.
9. ACCEPTANCE OR REJECTION: JEDO reserves the right to accept or reject any or all proposals or part of a proposal; to waive any informalities or technicalities; clarify any ambiguities in proposals; modify criteria in the request; and unless otherwise specified, to accept any item in a proposal.



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10. **CONTRACT:** The successful bidder will be required to enter into a written contract with JEDO.

11. **CONTRACT DOCUMENTS:** This request and any amendments and the bidder's response and any amendments shall be incorporated into the written contract which shall compose the complete understanding of the parties.

In the event of a conflict in terms of language among the documents, the following order shall govern:

- Written modifications to the executed contract;
- Written contract signed by the parties;
- This Request including any and all addenda, and;
- Contractor's proposal submitted in response to this Request as finalized.

12. **CONTRACT FORMATION:** No contract shall be considered to have been entered into by JEDO until all statutorily required signatures and certifications have been rendered; and a written contract has been signed by the successful vendor(s).

13. **OPEN RECORDS ACT:** All proposals become the property of JEDO. Kansas law requires all information contained in proposals to become open for public review (with certain exceptions available under the Act) once a contract is signed or all proposals rejected.

14. **FEDERAL, STATE AND LOCAL TAXES – GOVERNMENTAL ENTITY:** Unless otherwise specified, the proposal price shall include all applicable federal, state and local taxes. The successful vendor shall pay all taxes lawfully imposed on it with respect to any product or service delivered in accordance with this Request. JEDO is exempt from state sales or use taxes and federal excise taxes. These taxes shall not be included in the bidder's price quotations.

15. **SUSPENSION FROM BIDDING:** Any vendor who defaults on delivery as defined in this Request may, at the discretion of the Contracts & Procurement Director, be barred from bidding or receiving an award on any subsequent Request for a period of time to be determined by the Director.

16. **INSURANCE:** JEDO shall not be required to purchase any insurance against loss or damage to any personal property. The vendor shall bear the risk of any loss or damage to any personal property.

17. **CASH BASIS AND BUDGET LAWS:** All contracts entered into by JEDO are subject to the State of Kansas Cash Basis and Budget laws. Any obligation incurred as a result of the issuance of the contract or purchase order binds JEDO only to the extent that cash is available at the time payment is required. Furthermore, any contract that extends beyond the JEDO's current fiscal year does not create an indebtedness or obligation for the subsequent fiscal year, and JEDO reserves the right to cancel any contract until the first date of the subsequent fiscal year.

GENERAL PROVISIONS

1. **TERM OF CONTRACT:** The term shall be from date of execution through completion and acceptance by JEDO.

2. **INSPECTION:** JEDO reserves the right to reject, on arrival at destination, any items that do not conform to the specifications of this request.

3. **TERMINATION FOR CAUSE:** JEDO may terminate this contract, or any part of this contract, for cause under any one of the following circumstances:

- The Contractor fails to make delivery of goods or services as specified in this contract; or
- The Contractor fails to perform any of the provisions of this contract, or so fails to make progress as to endanger performance of this contract in accordance with its terms.

JEDO shall provide Contractor with written notice of the conditions endangering performance. If the Contractor fails to remedy the conditions within ten (10) days from the receipt of the notice (or such longer period as JEDO may authorize in writing) JEDO shall issue the Contractor an order to stop work immediately. Receipt of the notice shall be presumed to have occurred within three (3) days of the date of the notice.

4. **TERMINATION FOR CONVENIENCE:** JEDO may terminate performance of work under this contract in whole or in part whenever, for any reason, JEDO shall determine that the termination is in the best interest of the JEDO. In the event that JEDO elects to terminate this contract pursuant to this provision, it shall provide the Contractor written notice at least thirty (30) days prior to the termination date. The termination shall be effective as of the date specified in the notice. The Contractor shall continue to perform any part of the work that may not have been terminated by the notice.

5. **NOTICES:** All notices, demands, requests, approvals, reports, instructions, consents or other communications (collectively "notices") which may be required or desired to be given by either party to the other shall be in writing and shall be made by personal delivery or sent by United States certified mail, postage prepaid, return receipt requested or by overnight delivery, prepaid, addressed as follows:

Joint Economic Development Organization
City Attorney
City of Topeka
215 SE 7th Street
Topeka, KS 66603

or to any other persons or addresses as may be designated by notice from one party to the other.

6. **RIGHTS AND REMEDIES:** If this contract is terminated, JEDO, in addition to any other rights provided for in this contract, may require the Contractor to transfer title and deliver to the City in the manner and to the extent directed, any completed materials. JEDO shall be obligated only for those services and materials rendered and accepted prior to date of termination.

If it is determined, after notice of termination for cause, that Contractor's failure was due to causes beyond the control of or negligence of the Contractor, the termination shall be a termination in the best interest of JEDO. In the event of termination, the Contractor shall receive payment pro-rated for that portion of the contract period services were provided to and/or goods were accepted by JEDO subject to any offset by JEDO for actual damages including loss of matching funds.

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The rights and remedies of JEDO provided for in this contract shall not be exclusive and are in addition to any other rights and remedies provided by law.

7. **FORCE MAJEURE:** The Contractor shall not be liable if the failure to perform this contract arises out of causes beyond the control of the Contractor. Causes may include, but are not limited to Acts of Terrorism as defined under 6 CFR Part 25, freight embargoes, acts of nature, fires, quarantine and strikes other than by Contractor's employees.

8. **WAIVER:** Waiver of any breach of the provision in this contract shall not be a waiver of any prior or subsequent breach. Any waiver shall be in writing and any forbearance or indulgence in any other form or manner by JEDO shall not constitute a waiver.

9. **OWNERSHIP:** All data, forms, procedures, software, manuals, system descriptions and work flows developed or accumulated by the Contractor under this contract shall be owned by JEDO. The Contractor may not release any materials without the written approval of JEDO.

10. **INDEPENDENT CONTRACTOR:** Both parties, in the performance of this contract, shall be acting in their individual capacity and not as agents, employees, partners, joint venture or associates of one another. The employees or agents of one party shall not be construed to be the employees or agents of the other party for any purpose whatsoever.

The Contractor accepts full responsibility for payment of unemployment insurance, workers compensation and social security as well as all income tax deductions and any other taxes or payroll deductions required by law for its employees engaged in work authorized by this contract.

11. **STAFF QUALIFICATIONS:** The Contractor shall warrant that all persons assigned by it to the performance of this contract shall be employees of the Contractor (or specified Subcontractor) and shall be fully qualified to perform the work required. The Contractor shall include a similar provision in any contract with any Subcontractor selected to perform work under this contract.

Failure of the Contractor to provide qualified staffing at the level required by the proposal specifications may result in termination of this contract and/or damages.

12. **NONDISCRIMINATION AND WORKPLACE SAFETY:** The Contractor agrees to abide by all federal, state and local laws, rules and regulations prohibiting discrimination in employment and controlling workplace safety. Any violations of applicable laws, rules and regulations may result in termination of this contract.

13. **ENVIRONMENTAL PROTECTION:** The Contractor shall abide by all federal, state and local laws, rules and regulations regarding the protection of the environment. The Contractor shall report any violations to the applicable governmental agency. A violation of applicable laws, rule or regulations may result in termination of this contract.

14. **HOLD HARMLESS:** The Contractor shall indemnify JEDO against any and all claims for injury to or death of any persons; for loss or damage to any property; and for infringement of any copyright or patent occurring in connection with or in any way incidental to or arising out of the occupancy, use, service, operations or performance of work under this contract.

15. **RETENTION OF RECORDS:** Unless JEDO specifies in writing a shorter period of time, the Contractor agrees to preserve and make available all of its books, documents, papers, records and other evidence involving transactions related to this contract for a period of five (5) years from the date of the expiration or termination of the contract.

Matters involving litigation shall be kept for one (1) year following the termination of litigation, including all appeals, if the litigation exceeds five (5) years.

The Contractor agrees that authorized federal and state representatives, including but not limited to, personnel of the using department; independent auditors acting on behalf of JEDO and/or federal agencies shall have access to and the right to examine records during the contract period and during the five (5) year post-contract period. Delivery of and access to the records shall be at no cost to the City.

16. **FEDERAL, STATE AND LOCAL TAXES:** JEDO makes no representation as the exemption from liability of any tax imposed by any governmental entity on the Contractor.

17. **MODIFICATION:** This contract shall be modified only by written agreement of the parties. No alteration or variation of the terms and conditions of the contract shall be valid unless made in writing and signed by the parties. Every amendment shall specify the date on which its provisions shall be effective.

18. **ASSIGNMENT:** The Contractor shall not assign, convey, encumber, or otherwise transfer its rights or duties under this contract without the prior written consent of JEDO which consent shall not be unreasonably withheld or delayed.

This contract shall immediately terminate in the event of its assignment, conveyance, encumbrance or other transfer by the Contractor without the prior written consent of JEDO.

19. **THIRD PARTY BENEFICIARIES:** This contract shall be construed as providing an enforceable right to any third party.

20. **CAPTIONS:** The captions or headings in this contract are for reference only and do not define, describe, extend, or limit the scope or intent of this contract.

21. **SEVERABILITY:** If any provision of this contract is determined by a court of competent jurisdiction to be invalid or unenforceable to any extent, the remainder of this contract shall not be affected and each provision of this contract shall be enforced to the fullest extent permitted by law.

22. **GOVERNING LAW:** This contract shall be governed by the laws of the State of Kansas and shall be deemed executed at Topeka, Shawnee County, Kansas.

23. **JURISDICTION:** The parties shall bring any and all legal proceedings arising hereunder in the State of Kansas, District Court of Shawnee County. The United States District Court for the State of Kansas sitting in Topeka, Shawnee County, Kansas, shall be the venue for any federal action or proceeding arising hereunder in which JEDO is a party.

24. **INTEGRATION:** This contract, in its final composite form, shall represent the entire agreement between the parties and shall supersede all prior negotiations, representations or agreements, either written or oral, between the parties relating to the subject matter hereof. This contract between the parties shall be independent of and have no effect on any other contracts of either party.

33. **CRIMINAL OR CIVIL OFFENSE OF AN INDIVIDUAL OR ENTITY THAT CONTROLS A COMPANY OR ORGANIZATION OR WILL PERFORM WORK UNDER THIS CONTRACT:** Any conviction for a criminal or civil offense that indicates a lack of business integrity or business honesty must be disclosed. This includes (1) conviction of a criminal offense as an incident to obtaining or attempting to obtain a public or



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private contract or subcontract or in the performance of such contract or subcontract; (2) conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property; (3) conviction under state or federal antitrust statutes; and (4) any other offense to be so serious and compelling as to affect responsibility as a JEDO contractor. For the purpose of this section, and individual or entity shall be presumed to have control of a company or organization if the individual or entity directly or indirectly, or acting in concert with one or more individuals or entities, owns or controls 25 percent or more of its equity, or otherwise controls its management or policies. Failure to disclose an offense may result in disqualification of the bid or termination of the contract.

Insurance Requirements Page

INSURANCE REQUIREMENTS

WORKERS COMPENSATION: Contractor's, when required by law must maintain in effect throughout the life of this contract, Workers Compensation insurance to cover the contractor's employees, in full limits as required by statute.

INSURANCE RESPONSIBILITY & LIABILITY: Notwithstanding any language to the contrary, no interpretation shall be allowed to find the City or any of its departments, officers or employees responsible for loss or damage to persons or property as a result of the contractor's actions.

CONTRACTOR SHALL MAINTAIN MINIMUM COVERAGE AS FOLLOWS:

Commercial General Liability:
Per Occurrence \$1,000,000
General Aggregate \$2,000,000
Products & Completed Operations Coverage Aggregate \$2,000,000
Property Damage per occurrence \$100,000

Automobile Liability
Combined Single Limit for Bodily Injury and Property Damage Aggregate \$500,000

CERTIFICATES OF INSURANCE: Certificates of Insurance should be issued immediately after the Contractor received notification of award and prior to the notice to proceed. The Contractor must not commence any work under this Contract until Purchase Orders are issued by the City of Topeka.

NAMED INSURED: The City of Topeka shall be named as an additional insured party on the Certificate of Liability Insurance.

NOTIFICATION OF ALTERATION OR MATERIAL CHANGE OR CANCELLATION: A minimum of ten (10) days written notification must be given by an insurer or any alteration, material change, or cancellation affecting any certificates or policies of insurance as required under this Contract. Such required notification must be sent via Registered or Certified Mail to the address below:

City of Topeka
Contracts & Procurement Division
215 SE 7th Street, Room 60
Topeka, KS 66603

Attachments

Attachment

JEDO Special Provisions.doc

JEDO Broadband RFP Final 020917.docx

Event # 1366-1: Broadband Consulting Services

Commodity Codes

Commodity Code	Description
918	CONSULTING SERVICES

Line Details

Line 1: Broadband Consulting Services

Description: Broadband Consulting Services for the Topeka/Shawnee County Joint Economic Development Organization (JEDO). Enter 1.00 in the unit price on the line response. Upload your technical proposal and then upload your pricing proposal and any other desired supporting documentation. Be sure to select "SUBMIT" in order to submit your proposal.

Broadband Consulting Services

Commodity 918 CONSULTING SERVICES
Code:

Quantity: 1.0000

Require No
Response:

Price Breaks Allowed: No

Alternate Items No
Allowed:

Add On No
Charges
Allowed:

SPECIAL PROVISIONS

Proposal Format: The following information shall be part of the technical proposal: **Vendors are instructed to prepare their Technical Proposal following the same sequence as this section of the Request For Proposal.**

- (1) Transmittal letter which includes the following statements:
 - (a) That the vendor is the prime contractor and identifying all subcontractors
 - (b) That the vendor is a corporation or other legal entity
 - (c) That no attempt has been made or will be made to induce any other person or firm to submit or not to submit a proposal
 - (d) That the vendor does not discriminate in employment practices with regard to race, color, religion, age (except as provided by law), sex, marital status, political affiliation, national origin or disability
 - (e) That no cost or pricing information has been included in the transmittal letter or the Technical Proposal
 - (f) That the vendor presently has no interest, direct or indirect, which would conflict with the performance of services under this contract and shall not employ, in the performance of this contract, any person having a conflict
 - (g) That the person signing the proposal is authorized to make decisions as to pricing quoted and has not participated, and will not participate, in any action contrary to the above-statements;
 - (h) Whether there is a reasonable probability that the vendor is or will be associated with any parent, affiliate or subsidiary organization, either formally or informally, in supplying any service or furnishing any supplies or equipment to the vendor which would relate to the performance of this contract. If the statement is in the affirmative, the vendor is required to submit with the proposal, written certification and authorization from the parent, affiliate or subsidiary organization granting the JEDO and/or the federal government the right to examine any directly pertinent books, documents, papers and records involving such transactions related to the contract. Further, if at any time after a proposal is submitted, such an association arises, the vendor will obtain a similar certification and authorization and failure to do so will constitute grounds for termination of the contract at the option of JEDO.
 - (i) That the vendor has not been retained, nor has it retained a person to solicit or secure a JEDO contract on an agreement or understanding for a commission, percentage, brokerage or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the vendor for the purpose of securing business. For breach of this provision, the Committee shall have the right to reject the proposal, terminate the contract and/or deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee or other benefit.

Vendor's Qualifications: The vendor must include a discussion of the vendor's corporation and each subcontractor if any. The discussion shall include the following:

- (a) Date established
- (b) Ownership (public, partnership, subsidiary, etc.)
- (c) Number of personnel, full and part-time, assigned to this project by function and job title
- (d) Data processing resources and the extent they are dedicated to other matters
- (e) Location of the project within the vendor's organization
- (f) Relationship of the project and other lines of business and
- (g) Organizational chart

The contractor shall be the sole source of contact for the contract. JEDO will not subcontract any work under the contract to any other firm and will not deal with any subcontractors. The Contractor is totally responsible for all actions and work performed by its subcontractors. All terms, conditions and requirements of the contract shall apply without qualification to any services performed or goods provided by any subcontractor.

A description of the vendor's qualifications and experience providing the requested or similar service including resumes of personnel assigned to the project stating their education and work experience. The vendor must be an established firm recognized for its capacity to perform. The vendor must be capable of mobilizing sufficient personnel to meet the deadlines specified in the Request.

A timeline for implementing services.

Payment: To be negotiated.

REQUEST FOR PROPOSAL FOR BROADBAND CONSULTING SERVICES

Introduction: The Topeka and Shawnee County Joint Economic Development Organization (JEDO) is requesting responses from qualified consulting firms to assist JEDO in discovering and implementing a plan/public-private partnership necessary to provide sufficient, reliable, and affordable high speed broadband service delivery to the residents of Topeka and Shawnee County. Information regarding JEDO can be found at <http://www.jedoecodevo.com>.

Background: The Joint Economic Development Organization is a body made up of City of Topeka Council and Board of County Commissioners of the County of Shawnee, Kansas elected officials who oversee the use of revenue from a countywide half-cent sales tax that county voters approved in a ballot question election. The voting members of the board include the three County Commissioners, the Mayor and Deputy Mayor and two city councilmembers of the City of Topeka. The remaining city councilmembers are ex-officio non-voting members of the board. Shawnee County, Kansas is the third largest county in the state of Kansas and is home of the capital city, Topeka. The County encompasses five cities (Topeka, Silver Lake, Auburn, Rossville and Willard) and twelve Townships with a population of approximately 184,000. The Topeka Metropolitan Service Area (MSA) includes five counties total with a population in excess of 230,000.

Shawnee County enjoys a central geographic location with Interstate 70, Interstate 335 (Interstate 35 only a short distance away) and Highway 75 reaching all four directions. The Kansas River runs through the center of downtown Topeka. Kansas City International Airport is located about an hour away. Washburn University calls Topeka home and the University of Kansas is a short distance to the east and Kansas State University to the west. These Universities draw young talent to Topeka to make up a diverse and highly skilled workforce. Washburn Institute of Technology provides specialized training for the manufacturers and businesses in the area. The community has a robust quality of life including multiple golf courses and parks, trails, World Famous Topeka Zoo, the Topeka Performing Arts Center, and the Kansas Expocentre.

The Intergovernmental Cooperation Council (ICC) initiated discussion on the broadband initiative several years ago. As a result of those discussions, the City of Topeka and Shawnee County as a single community was selected as a pilot community to address high speed broadband service delivery by the Kansas Department of Commerce (KDOC) in August of 2014 as part of the Kansas Department of Commerce Statewide Broadband Initiative. The definition of a single community for the purposes of this RFP is all taxing entities, anchor institutions, businesses and citizens residing within Shawnee County. The pilot project is supported by the KDOC final report that can be found at <https://tscpl.org/community-broadband>. The KDOC final report determined the following feasibility information necessary to support a fiber to the premise plan:

- A Broadband Impact Potential Index of 1.39 using the economic data and analysis tool IMPLAN as the primary economic impact modeling platform. Economic impact study results and summary of methodology can be found in Appendix: B of the KDOC final report.
- Feasibility for a city-wide fiber network that passes each home and business to be deployed and maintained in Topeka using the Gigabit Broadband Model. The Business Case Study, Key Assumptions and Inputs can be found in Appendix: C of the KDOC Final Report.

Purpose: The purpose of this RFP is to contract with a consulting firm to assist JEDO to formulate and execute a plan to form public-private partnerships necessary to build and operate a fiber to the premise network within the City of Topeka, and/or to build and operate fiber to the premise networks within the rural townships of Shawnee County and/or to build and operate a Wireless Internet Service Provider infrastructure within the rural areas of Shawnee County.

Objective: The primary objective of a resulting plan is to:

“Address the region’s economic and community development; as well as quality of life through improving countywide access and utilization of sufficient, reliable, and affordable broadband infrastructure”

Plan Execution Strategy: Consulting services provided for the purpose of this RFP will be utilized by the JEDO Board in an incremental and phased approach. Movement from phase to phase is contingent upon successful completion of the preceding phase. The JEDO Board and/or its designees will be the authority to determine successful completion and acceptance of each phase. The successful respondent shall provide a not to exceed estimate for each phase. The JEDO Board and/or its designees reserve the right at any time to remove any step within a phase and add additional requirements and services within each phase. Removal of steps within each phase or the addition of requirements within each phase shall be transacted through change orders. The change order process shall be based on a mutually agreeable process and change order documentation. Each change order shall be priced not to exceed prior to final acceptance. There will be no set time frame between the start and completion of each phase. While it is the desire of the JEDO Board to strive to reach each goal as rapidly as possible, each goal is contingent upon community acceptance, the formation of sustainable and cost effective public-private partnerships and the discovery and identification of potential initial and on-going funding and revenue sources. All respondents shall be willing to enter into a collaborative and contractual partnership with JEDO.

Services: The successful respondent shall be capable of providing the following services based on the following proposed plan execution strategy:

Phase-1 – Analysis

1. The successful respondent shall meet with stakeholders to hold a Phase-1 kickoff meeting.
2. The successful respondent shall establish subject matter expertise with all aspects of the Topeka City & Shawnee County Local Community Technology Planning Pilot Project KDOC final report and supporting documentation.
3. The successful respondent shall perform a review of the economic impact study contained in the KDOC final report and provide an opinion to validate if the findings within the KDOC final report are accurate and viable.
4. The successful respondent shall perform a review of the business case for high-speed broadband within Topeka and Shawnee County contained in the KDOC final report and provide an opinion to validate if the findings within the KDOC final report are accurate and viable.
5. The successful respondent may need to consult with VisionTech360 and CostQuest Associates to fulfill steps 3 and 4.
6. The successful respondent shall compile a consultant's report based on findings and opinions formulated from steps 2-4 with recommendations to include an opinion regarding the need for a revised demand study.
7. The successful respondent shall meet with stakeholders to present the consultant's report, recommendations for moving forward, obtain stakeholder feedback, work with stakeholders to provide decision support and to work with stakeholders to gain consensus necessary to move to Phase-2.
8. The successful respondent shall create a presentation explaining the consultant's report and stakeholder feedback necessary to present to the JEDO Board.
9. The successful respondent shall meet with stakeholders to present the consultant's presentation for the JEDO Board and obtain stakeholder feedback regarding the consultant's presentation and any potential changes.

Phase-2 – Presentation

1. The successful respondent shall meet with the JEDO Board to present an overview and assessment of the consultant's report to include results of the final stakeholder meeting held during Phase-1 step 7.
2. The successful respondent shall meet with the JEDO Board and designees to enter into discussion and provide decision support necessary to potentially take the following actions:

- To arrive at a decision to prepare and submit a Request for Information (RFI) necessary to seek out and identify public-private partners interested in building and operating a fiber to the premise network within the City of Topeka.
- To arrive at a decision to prepare and submit an RFI necessary to seek out and identify public-private partners interested in building and operating a fiber to the premise network within the rural townships of Shawnee County.
- To arrive at a decision to prepare and submit an RFI necessary to seek out and identify public-private partners interested in building and operating a Wireless Internet Service Provider infrastructure within the rural areas of Shawnee County.
- To prioritize the order of each potential action.
- To establish a proposed timeline and schedule for executing each potential action.
- To arrive at a decision to look at alternative actions necessary to meet the objective listed on page 2 in the event there is no interest by the JEDO Board to release an RFI or RFI's.

Phase-3 – RFI Execution

1. The successful respondent shall collaborate with the JEDO Board and/or designees and legal counsel to draft the necessary RFI or RFI's based on the direction and decisions from Phase-2.
2. The successful respondent shall present the proposed RFI or RFI's to the JEDO Board and/or designees and legal counsel necessary to obtain approval for public release.
3. The successful respondent shall collaborate with the JEDO Board and/or designees and legal counsel to publically issue the RFI or RFI's.
4. The successful respondent shall collaborate with the JEDO Board and/or designees and legal counsel to coordinate the RFI process and to gather information and provide answers to questions submitted by potential responders necessary to support accurate RFI responses.
5. The successful respondent shall collect submitted RFI or RFI's and evaluate each RFI for general acceptability, evaluate each respondent's qualifications, evaluate the ability of each respondent to deliver proposed solutions and strategies, evaluate each RFI for feasibility of proposed sustainable public-private partnerships, evaluate each RFI for

feasibility of proposed costs and evaluate each RFI for feasibility regarding proposed initial and on-going funding.

6. The successful respondent shall determine any potential outside funding opportunities in the form of grants necessary to supplement valid RFI responses.
7. The successful respondent shall create a decision matrix necessary to accurately rate each RFI response based on consultants evaluation of general acceptability, consultants evaluation of each respondent's qualifications, consultants evaluation of each respondent's ability to deliver proposed solutions and strategies, consultants evaluation of the feasibility of proposed sustainable public-private partnerships, the consultants evaluation of proposed costs and funding source mechanisms and any grant opportunities determined by consultant necessary to supplement valid RFI responses. The resulting decision matrix will be used to provide decision support to the JEDO Board and/or designees.
8. The successful respondent shall create a report detailing consultant's opinions necessary to support each finding within the decision matrix and to provide a consultant's recommendations for moving forward.
9. The successful respondent shall present the report and decision matrix to the JEDO Board and/or designees and legal counsel.
10. The successful respondent shall meet with the JEDO Board, designees and legal counsel to enter into discussion and provide decision support necessary to potentially take the following actions:
 - To select an RFI or RFI's that will best meet the objective listed on page 2.
 - To arrive at a decision to create an RFP or RFP's in response to the selected RFI or RFI's.
 - To arrive at a decision to look at alternative actions necessary to meet the objective listed on page 2 in the event there is no interest by the JEDO Board to move forward with issuing an RFP or RFP's.

Phase-4 – RFP Execution

1. The successful respondent shall collaborate with the JEDO Board and/or designees and legal counsel to draft the necessary RFP or RFP's based on the direction and decisions from Phase-3.
2. The successful respondent shall present the proposed RFP or RFP's to the JEDO Board and/or designees and legal counsel necessary to obtain approval for public release.

3. The successful respondent shall collaborate with the JEDO Board and/or designees and legal counsel to publically issue the RFP or RFP's.
4. The successful respondent shall collaborate with the JEDO Board and/or designees and legal counsel to coordinate the RFP process and to gather information and provide answers to questions submitted by potential responders necessary to support accurate RFP responses.
5. The successful respondent shall assist JEDO in evaluating all aspects of responses to the RFP.
6. The successful respondent shall determine any potential outside funding opportunities in the form of grants necessary to supplement valid RFP responses.
7. The successful respondent shall create a decision matrix necessary to accurately rate each RFP response based on consultants evaluation of general acceptability, consultants evaluation of each respondent's qualifications, consultants evaluation of each respondent's ability to deliver proposed solutions and strategies, consultants evaluation of the feasibility of proposed sustainable public-private partnerships, the consultants evaluation of proposed costs and funding source mechanisms and any grant opportunities determined by consultant necessary to supplement valid RFP responses. The resulting decision matrix will be used to provide decision support to the JEDO Board and/or designees.
8. The successful respondent shall create a report detailing consultant's opinions necessary to support each finding within the decision matrix and to provide a consultant's recommendations for moving forward.
9. The successful respondent shall present the report and decision matrix to the JEDO Board and/or designees and legal counsel.
10. The successful respondent shall meet with the JEDO Board, designees and legal counsel to enter into discussion and provide decision support necessary to potentially take the following actions:
 - To select RFP's that will best meet the objective listed on page 2 to award to respondents.
 - To arrive at a decision to look at alternative actions necessary to meet the objective listed on page 2 the event there is no interest by the JEDO Board to release an RFP or RFP's.

Phase-5 – RFP/Taxing Entity Project Handoff

1. The successful respondent will act as the liaison between the JEDO Board and/or designees and vendor/s who are awarded RFP's necessary to establish contracts with selected vendor/s.
2. The successful respondent shall assist the JEDO Board and/or designees in negotiating any final scope of services, project plans, project timelines and final pricing with vendor/s who are awarded RFP's.
3. The successful respondent shall assist the JEDO Board and/or designees with completing and submitting any grant applications necessary to supplement successful RFP responses.
4. The successful respondent shall assist the JEDO Board and/or designees in producing contracts to be executed between the successful RFP respondents or respondents.
5. The successful respondent shall facilitate a kick-off meeting between the successful RFP respondent and the assigned principal project manager of each taxing entity managing projects as defined by an RFP or RFP's.

Proposals: Interested parties shall submit their proposal and supporting documentation online through the City of Topeka's eProcurement Supplier Portal. Interested parties will need to register in order to submit a proposal online. The link to the portal is:

<https://cotprod-lm01.cloud.infor.com/lmscm/SourcingSupplier/controller.servlet?dataarea=lmscm&context.session.key.SupplierGroup=COT>

Conceptual Plan

The Contractor shall provide a conceptual plan for the product/services believed to be appropriate for the JEDO. The plan should indicate product features and outline personnel skills and services that distinguish the Contractor, incorporating appropriate staff profiles. The staff profile should describe the Contractor's experience in providing services to the public sector, jobs of similar size(s) and provide applicable certifications for staff members involved in the process. Three (3) references are to be included with the proposal.

Submittal Process and Details

Technical Proposals should include the following:

- Contractor's name, address, and names of primary contacts.
- Statement of Qualifications
- A description of specific staff that will comprise the project team for this assignment.
- Samples of related/comparable past projects that would serve as examples of experience and expertise necessary for this work.
- Evidence of ability to work with short deadlines pertaining to milestones, project tasks, etc.

Estimated Timeline

March-April 2017
May 10, 2017

RFPs reviewed
Final Recommendation to JEDO

The above dates are subject to change at the discretion of the JEDO Board.

Proposal Terms

A copy of JEDO Resolution No. 2004-1, entitled A Resolution Establishing Purchasing Procedures Involving the Expenditure of JEDO Funds shall be followed.

The JEDO reserves the right to reject any and all proposals received as a result of this Request for Proposal. If a proposal is selected, it will be the most advantageous regarding quality of service, the vendor's qualifications, and capabilities to provide the specified service, and other factors which the JEDO may consider. The JEDO reserves the right to waive or not waive informalities or irregularities in proposals or proposal procedures, and to accept or further negotiate cost, terms, or conditions of any proposal determined by the JEDO to be in the best interests of the JEDO even though not the lowest bid.

Proposals must be valid for a minimum of ninety (90) days. Failure of the successful bidder to accept the obligation of the bid may result in the cancellation of any award. A service contract will be executed between the JEDO and the awarded vendor. The service contract shall provide for, inter alia, insurance requirements; accounting, audit, product ownership, and other terms.

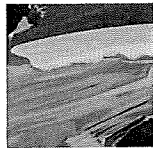
Evaluation of Proposals

JEDO intends to appoint the Mayor's Broadband Task Force to evaluate all proposals submitted in response to this RFP. As part of this process, the Task Force will appoint a subcommittee consisting of a representative from each of the following: 1) The City of Topeka; 2) Shawnee County; 3) a local school district; 4) the Topeka & Shawnee County Public Library; and 5) GOTopeka. The subcommittee will review all proposals and make an initial recommendation to the full Task Force. The full Task Force will then make a final recommendation to JEDO. This final recommendation will be advisory only, and JEDO reserves the right to reject the Task Force's recommendation and select an alternate proposal. Each proposal will be considered as a qualification based proposal. Consideration shall be made in the best interest of JEDO as determined by the Task Force and its subcommittee.

EXHIBIT B

Response to Request for Proposals for Broadband Consulting Services

Topeka and Shawnee County Joint Economic Development Organization
Technical Proposal



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Tilson Technology Management

5347 S. Valentia Way

Greenwood Village, CO 80111

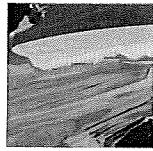
Phone: 207-591-6427

Fax: 207-772-3427

Primary Contact: Christopher Campbell

Federal ID No.: 01-0509537

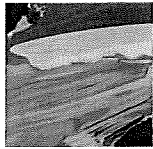
Offer is firm and not revocable for a period of ninety (90) days.



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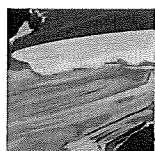
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1. Experience and Qualifications

Tilson is pleased to offer its services to the City of Topeka and Shawnee County Joint Economic Development Organization (JEDO) to develop and implement a plan/public-private partnership that will provide sufficient, reliable, and affordable high speed broadband service delivery to the residents of Topeka and Shawnee County. For this project we have assembled a team led by Tilson and supported by Camoin Associates and CostQuest Associates that will build on the work the City and County have done previously, carefully validate it, and propel the City and County's forward toward its objectives. Tilson brings to this engagement its own experience designing, permitting, project-managing, and deploying telecommunications infrastructure, and advising states and communities seeking to improve their broadband infrastructure and services. Our experience with both public and private sector entities active in broadband will provide JEDO with valuable insight. We also bring to the project partners with particular expertise in the services requested by JEDO. Camoin Associates brings a long track record of assisting states and communities in their approach to economic development. CostQuest Associates brings a deep background in industry cost modeling, including the development of cost models for Topeka. This section addresses the experience of all three firms.

Tilson

Tilson is a multi-specialty telecommunications services firm. We have over seven years of experience designing, building, and maintaining telecommunications networks using both wireless and fiber technologies, in middle- and last-mile applications. Our deep bench of in-house resources allows us to participate in many projects from conception and planning through engineering and construction. Our engineering department supports all consulting and planning engagements with fiber designs as part of many preplanning exercises and often moves into detailed engineering once funding is secured. In other cases, Tilson's engineering and permitting team may be called upon to begin a project during the implementation phase, after all due diligence has been completed by others. Below is a variety of projects Tilson has been a part of that showcases our team's abilities and past performance.

Tilson was founded in 1996 and has since grown to include over 200 employees in eight offices around the United States, including the Denver, Colorado metro area. Tilson is a privately held C Corporation majority owned by our CEO, Joshua Broder.

Tilson's value lies in bringing several telecommunications-centric services under one roof. We help our clients develop an understanding of their needs by working with them to articulate where they currently stand, where they reasonably would like to be, and helping to map out the necessary steps to take. Since we are not a service provider, we provide a neutral perspective, weighing alternative solutions strictly on their merits and how well they meet client goals. Many of our broadband clients later select Tilson to provide fiber design, engineering, and construction services. In that market, we provide turnkey solutions: everything from acquiring land rights and producing stamped, engineered drawings to full general contractor services. Tilson's public sector Broadband Consulting clients benefit from the experience of Tilson not only consulting but implementing telecommunications infrastructure projects for a wide range of service providers, utilities, and government entities.

This project fits within Tilson's Broadband Consulting service offering. The Broadband Consulting group is organized per the below diagram. In addition, this project will draw on project management resources



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from our Government consulting group, and wireless and fiber engineering resources from our Engineering division.

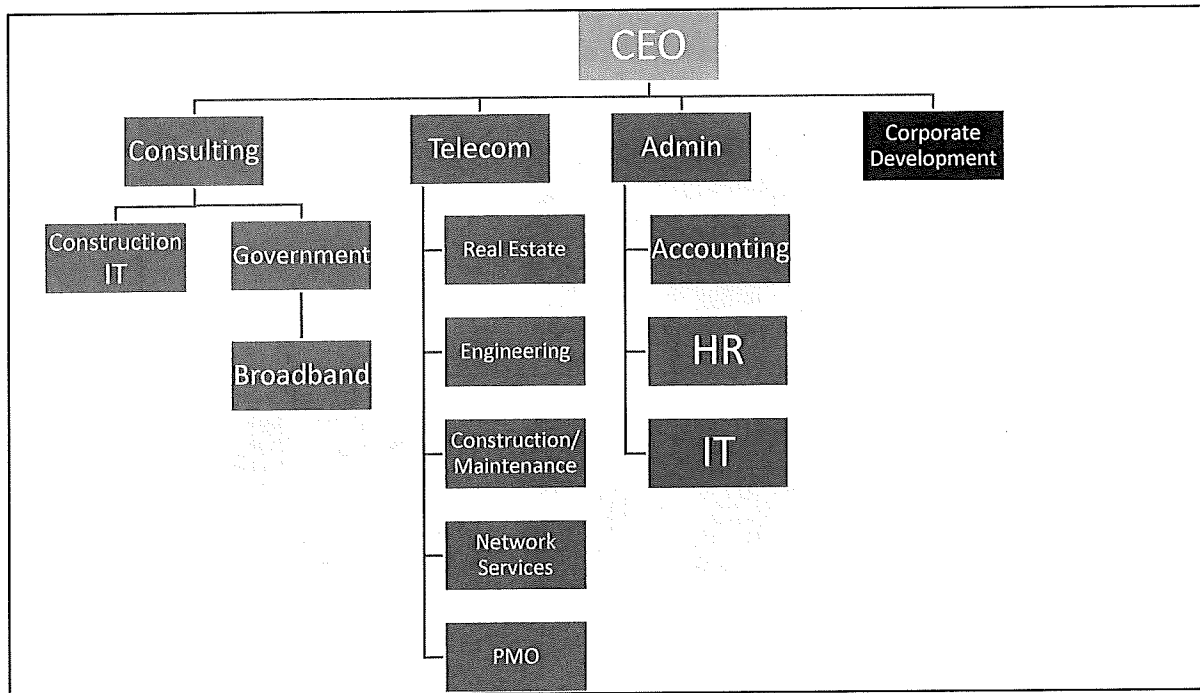
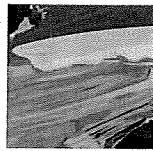


Figure 1 - Tilson Organizational Chart



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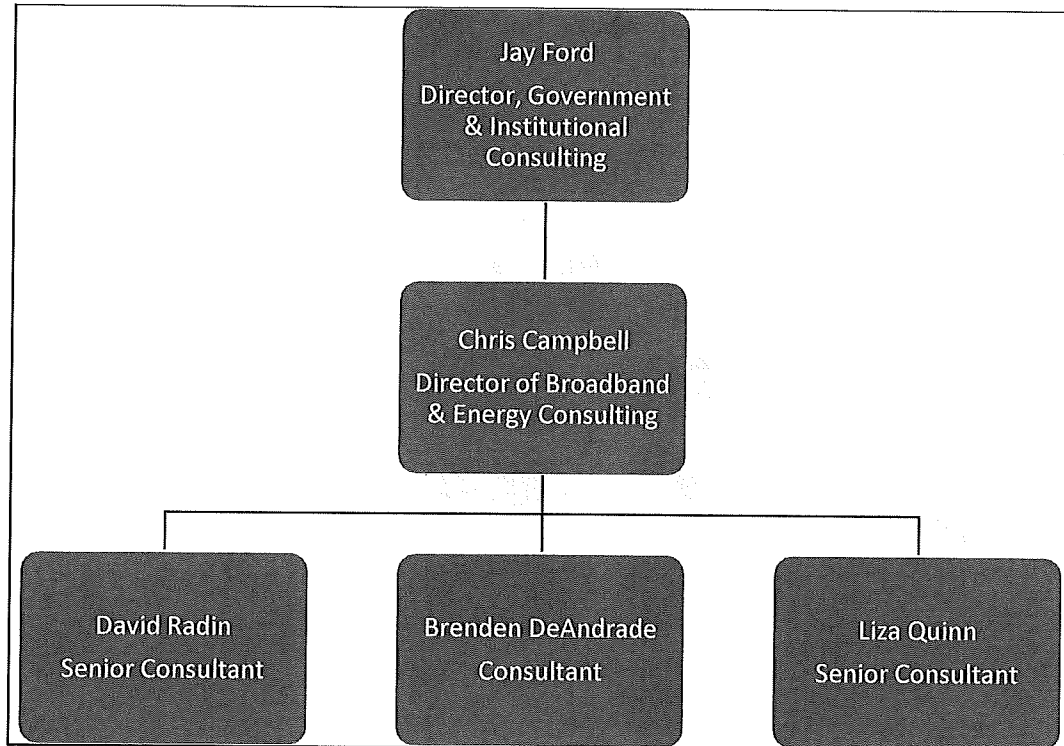


Figure 2 - Broadband Consulting Organizational Chart

Tilson Experience Examples

Baca, Bent, Crowley, Kiowa, Otero, and Prowers Counties, Colorado

Tilson is currently working with a six-county region in southeastern Colorado to develop a strategic broadband plan that will enable the region to improve its infrastructure in a manner that leverages existing national, state and private resources. Tilson is currently assisting the region with defining broadband goals, mapping current broadband infrastructure and service availability, conducting community education and input workshops, developing and administering a survey, documenting national, state and private broadband efforts underway, identifying broadband gaps, developing design solutions for a sample of unserved areas, and providing an overview of operating model options. The result of the project will be a strategic plan document and series of community meetings with each county to educate residents and receive input on desired solutions. Following the successful completion of this project, the region will have a plan in place to build out connectivity subject to funds availability and political desire to do so.

City of Cambridge, MA (Broadband Assessment & Feasibility Study)

Tilson conducted a comprehensive inventory of existing broadband services in the City of Cambridge and proposed three alternatives for FTTP encompassing different levels of capital commitment and connectivity. As part of this project, Tilson assisted the City's Broadband Task Force and City staff develop recommendations to the City Council. First, Tilson developed and implemented a community engagement plan to seek input from residents and businesses from all areas of the City, which included facilitating two



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large-group public meetings. Next, Tilson identified the service gap to define desired broadband service levels and determine underserved areas, then quantify their level of service compared with other parts of the City. Third, Tilson worked with the City and stakeholders to develop a range of alternatives for improving access. Finally, recognizing the community's desire for and the suitability to its needs of a fiber-based solution, Tilson proposed three discrete fiber network buildout plans suiting different capital commitment levels and service improvement goals. For each, Tilson provided a high-level network design and cost estimate. Tilson also advised the City on the tradeoffs and implications associated with different business and financing models for a municipal-scale network.

Empire State Development Broadband Program Office

ConnectNY Broadband Program Field Audits

Tilson provided services around the State Grant Awards issued under the ConnectNY Program. Services provided included interviews with the awardees, conducting field verification, and generating reports on a sample of projects selected by the BPO for desktop review. Interviews with the awardees were centered on a status update in regards to their Project Milestones and Key Project Indicators (KPIs), any potential red flags while constructing their awarded network, and required follow up items by the BPO. The sample of field audits looked to verify that the awardees' networks have been built according to the documented KPIs, Project Milestones, submitted address points, proposed broadband speeds, and constructed to industry standards.

New NY Broadband Grant Program – Application Evaluations

Tilson provided services to the New York Broadband Program Office (BPO) in connection with its New NY Broadband Grant Program. This program allocates up to \$500 million in state grants to subsidize broadband providers in building their networks to unserved and underserved parts of New York State. Grants were allocated via a reverse auction process that Tilson designed and implemented. Services provided included technical and financial reviews of proposed projects, program design, and consultation on policy issues. Project work has included providing an interface with broadband service providers and structured collection of data requested by the BPO. Tilson provided project management of a consulting team on the review of New NY grant applications, including the BPO's GIS vendors. Tilson also consulted as part of the BPO's advisory team on the application of geospatial analysis to programmatic questions, especially the development of grant-eligible census blocks and partial blocks from service-provider data, FCC Form 477 data, and future Connect America Fund-eligible areas.

Following Tilson's performance in Phase 1, the Broadband Program Office (BPO) re-engaged Tilson in the same capacity for Phase 2 of the New NY Broadband Grant Program. Services provided in this phase included pre-evaluation planning efforts, technical and financial reviews of proposed projects, program design, and consultation on policy issues. The pre-evaluation planning efforts consisted of leveraging Phase 1 efficiencies, minor tweaks, the mechanization of certain application materials, a streamlined Reverse Auction tool, and mechanization of the final reports generated by the results of the Reverse Auction. Because of these process efficiencies, Tilson could meet the thirty (30) day timeframe associated with Phase 2 of the program despite twice the volume of applications received in Phase 1.

New Shoreham, Rhode Island (Block Island)

Tilson performed an assessment of existing broadband infrastructure, advised the Town regarding technology and business model options for a town-wide broadband network, estimated its costs, conducted an RFI and helped the town select an ISP partner, and created a detailed cost estimate and



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engineering plan for a town-wide FTTH network. Tilson has also completed field surveys of all utility poles on island as part of the engineering of a hybrid GPON FTTH network with Active Ethernet overlay. Tilson also advised the Town on its purchase of the local electric utility. This included an assessment of the synergies associated with joint ownership of an electric utility and broadband service provider. Tilson continues to support New Shoreham as the Town debates financing the project, having already selected Tilson as a design-build contractor once funding is secured. Separately, Tilson has assisted Verizon Wireless to design, permit and implement their eastern New England pilot for ultra-dense small cell high speed LTE networks in this community.

City of Sanford, ME

Tilson prepared three distinct network designs and cost estimates, developed five alternative operating models, conducted a telecommunications asset inventory, and led vendor selection activities that identified a viable network operator and county partner. As part of the RFP process, Tilson met with likely bidders to provide information and answer questions regarding the City's requirements, handled distribution of the RFP, held a pre-bid call with potential respondents, and prepared responses to vendor technical questions prior to review and scoring of vendor responses and the ultimate recommendation of vendor. Tilson also provided negotiations support which included meeting facilitation between the respondents and City stakeholders and negotiation support to secure the letter of intent from the chosen vendor.

Somerset County, ME

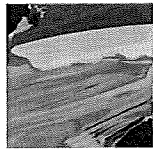
Tilson assisted the Kennebec Valley Council of Governments in securing a grant from the ConnectME Authority for broadband planning. Using the grant funds, Tilson partnered with a local wireless ISP to design a hybrid fiber-wireless network capable of providing high speed internet services to a significant portion of currently unserved or underserved towns in the county. The comprehensive solution also included a plan to provide affordable internet service and equipment, cultivate digital literacy, and provide publicly accessible computers. Deliverables included a high-level network design and cost estimate, business case analysis, and digital inclusion approach.

Massachusetts Broadband Institute (MassBroadband123)

Tilson served as owner's engineer and project manager for this \$91MM, 1,300-mile fiber-optic network build out to over 1,200 public safety and other state facilities including E911 centers, state police barracks, and fire/rescue locations. The project received funding from the federal Department of Commerce and National Telecommunications and Information Administration. Our responsibilities included strategic planning, route design, business modeling, cost estimation, test and acceptance procedure design, intergovernmental coordination between department of transportation, public safety agencies, and industry, and project and construction management services in this engagement. This included developing a comprehensive construction cost estimate for the design build requirements and managing over 20,000 Verizon, Western Mass Electric Company, National Grid, Unitil, and municipal light district-owned utility poles in licensing and make ready. Tilson network engineers developed next generation interoperability and design standards for DWDM, routing, voice, and switching facilities.

Middlebury, VT

Tilson's client for this project was the Middlebury Business Development fund (a cooperative effort between the Town of Middlebury, Vermont and Middlebury College). The Town of Middlebury, Vermont is a community with a population of approximately 8,500.



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Tilson supported conversations with stakeholders, including Middlebury College, towns and school districts in the region, local health care providers, and key business users, to gauge and cultivate support for the Town's broadband improvement project. As part of this project, Tilson conducted a high-level inventory scan of the current broadband infrastructure and services in the region, identifying the broadband services offered in the area and the companies offering them with the objective of defining the service gaps in the Town. Tilson took the broadband standard sought and defined by the Middlebury Office of Business Development and identified the technical characteristics of such a network, including upload bandwidth, download bandwidth, latency, resilience, quality of service, identifying the range of applications that a network built to this standard would support, in particular applications relevant to the key stakeholders in the education, health care and economic development fields. As part of this work, Tilson also developed a high-level network design and cost estimate to implement a solution that met the community standard. In addition, Tilson provided business model alternatives and advice on selecting from among the alternatives as well as an analysis of financial models for a project, including different phases. Tilson also provided guidance and lessons learned from network build-outs in other similar communities and provided ongoing support for the Town's conversations with potential funders for a network.

Camoin Associates

Camoin Associates measures its projects solely by tangible metrics, namely job creation and capital investment. Across its service lines, the projects that Camoin completes are intended to stimulate investment as the means of achieving the economic development objectives of the firm's clients through strategy development, public policy evaluation, and project implementation.

Camoin's service mix has been carefully designed so that it has the capability to offer start-to-finish economic development solutions for organizations and communities that do not have or need this capacity full-time. Main service areas include:

- Economic Development Strategic Planning
- Workforce Development Planning & Analysis
- Economic & Fiscal Impact Analysis
- Market & Feasibility Analysis
- Program & Service Evaluation
- Economic Development Organization (EDO) Advisement
- Technology and Energy-led Economic Development

Robert Camoin founded Camoin Associates in 1999 with the conviction that successful development requires leadership, strategy informed by market intelligence that targets economic opportunities and addresses the needs of businesses, and communities and regions to leverage private investment. Camoin is organized as a privately held S-Corporation. Since its inception, Camoin Associates has specialized in providing economic development solutions to both public and private sector clients. Through the services offered, Camoin Associates has had the opportunity to serve Economic Development Organizations and local and state governments from Maine to California; corporations and organizations that include Lowes Home Improvement, FedEx, Volvo (Nova Bus), and the New York Islanders; as well as private developers proposing projects more than \$4 billion. **Error! Reference source not found.** is an organizational chart of Camoin Associates.



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Underpinning Camoin's analyses are world-class data sources. These cutting-edge sources provide robust, highly useful, and comprehensive data on past, present, and future economic trends in every community we work in. Employing data from these top-notch providers and integrating them with local, regional, state, and national data guarantees that Camoin clients benefit from strategy and analysis founded in market realities. Data providers include Economic Modeling Specialists International, ESRI BAO, IBISWorld, CoStar Group, Smith Travel Research, and Shaping Tomorrow.

Camoin's reputation for detailed, place-specific, and accurate analysis has led to projects in 29 states and garnered firm attention from national media outlets including NPR's *Marketplace*, *Forbes Magazine*, and *The Wall Street Journal*. Additionally, Camoin's marketing strategies have helped its clients gain both national and local media coverage for their projects to build public support and leverage additional funding.

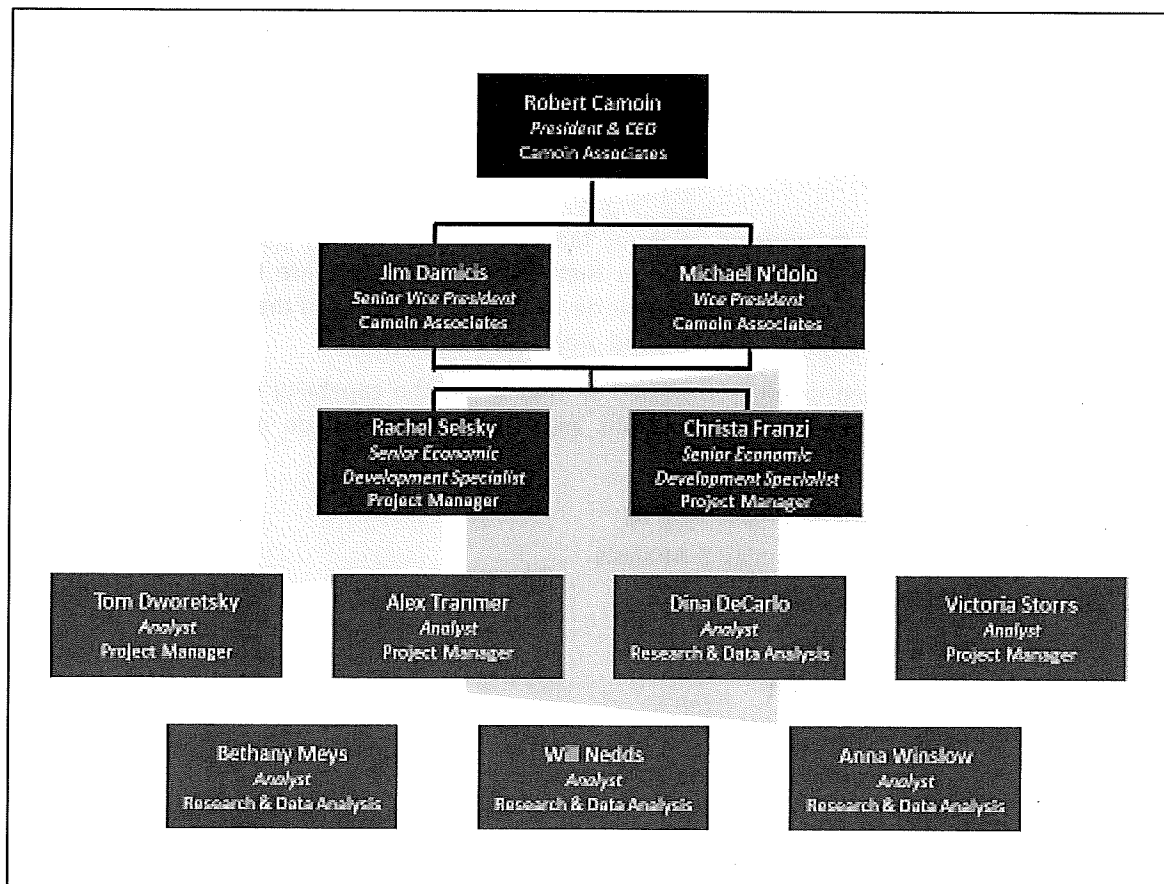


Figure 3 - Camoin Associates Organizational Chart

Camoin will be responsible for the validation of the economic impact study. Economic impact studies are one of its principal lines of business.



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Camoin Experience Examples

Economic Impact Analysis of Downtown Santa Monica's High-Tech Sector

Client: Downtown Santa Monica, Inc. | Study Area: Santa Monica, CA

The City of Santa Monica comprises part of the “Silicon Beach” region, the technology hub in Los Angeles Westside that is home to hundreds of high-tech companies, large and small. The Downtown Santa Monica Business Improvement District (BID) is an important technology center within the greater region. While the high-tech sector continues to thrive within the BID, a limited inventory of office space and other restricting factors may prevent the future expansion of, and private investment in, the industry and could lead to Santa Monica losing out to other communities in the region.

Downtown Santa Monica, Inc. commissioned an economic impact analysis to quantify the effects of the jobs and economic activity supported by the presence of the sector in the BID and demonstrate its importance to the economic well-being of both the BID and Santa Monica overall. The study also tracked the historic and projected performance of the sector compared to other key industries, as well as projecting future sector demands for office space in Downtown Santa Monica. Finally, the study identified key support industries and factors critical to the success of the sector.

Project Highlights

- Economic impact of an industry sector
- Identification of support industries
- Office-space demand projections

Economic Impact Study of New York State Film Tax Credit Program

Client: Empire State Development | Study Area: New York State

Empire State Development (ESD) administers the New York State Film Tax Credit Program, a program first established in 2004 and designed to increase the film and television production and post-production industry presence in New York State, and to provide an overall positive impact to the State's economy. The Program provides tax credit incentives to qualified production companies that produce feature films, television series, television pilots and films for television, and/or incur post-production costs associated with these productions to support the growth of the film industry in New York State.

Camoin Associates was hired by ESD to calculate the economic and fiscal impact of the State's investment in the program over the years 2013 and 2014. To complete this analysis Camoin Associates conducted significant research including a review of existing literature on the topic, industry data collection and analysis, and interviews with experts in the film industry in New York State. The report provides background on the tax credit programs, calculates and analyzes the economic and fiscal impact of the program in NYS, and finally estimates the return on investment (ROI) ratio that compares the annual investment in the credit (amount of credits issued) to the annual income that state and local governments receive (amount of tax revenue generated by the industry).

Project Highlights:

- Tax credit program analysis



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- Data collection and analysis
- Key stakeholder interviews
- Economic and fiscal modeling

Economic and Fiscal Impact Analysis of Schenectady County's Military Installations

Client: Chamber of Schenectady County | Study Area: Schenectady County, NY

Schenectady County is home to Stratton Air National Guard Base, the SSG Horace D. Bradt Army Reserve Center, and the Navy Operational Support Center. Among the units at these installations is the 109th Airlift Wing, the only operation in the world that flies ski-equipped cargo planes to Greenland, the Arctic Ice Cap, and Antarctica. The installations generate a significant economic impact to the local economy from direct and indirect jobs they generate locally and from the wages paid to those workers that is spent at local businesses.

Camoin Associates conducted an economic impact study that found the installations have an annual economic impact of over 1,000 jobs, \$65 million in wages, and \$21 million in sales in Schenectady County. Camoin also prepared case studies to show the positive impact on the community beyond dollars and cents and showcased the unique skills and occupations of personnel at the installations.

Project Highlights:

- Economic Impact Analysis
- Community Benefit Case Studies
- Unique Occupational Skills Profiles

Offshore Wind Industry Analysis

Client: New York Power Authority | Study Area: New York State

As part of a study examining the economic development potential of an offshore wind farm in the Great Lakes, Camoin Associates built a series of models to estimate the economic impact of three different levels of offshore wind industry development in New York State. These impact scenarios were used to demonstrate the probable economic impact if the state can establish itself as a leader in the offshore wind industry.

Camoin Associates analyzed energy-sector trends in general, as well as offshore wind economics, and the experimentation occurring in Europe with novel systems and large arrays of offshore turbines. Our work showed New York State the cost-benefit of making a major investment in the industry.

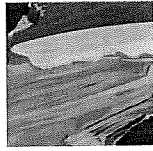
Project Highlights

- Economic Impact Analysis and Calculation of Return on Public Investment
- Energy Sector Analysis and Forecasting
- Public Sector Energy Development Strategies

Economic Impact Analysis of the Proposed NYS Islanders Arena Project

Client: Nassau County IDA | Site Area: Nassau County, NY

Whether to replace the existing Nassau Coliseum (the current home of the NYS Islanders hockey team) with a new arena has been the subject of a heated political debate for several years. A proposal was



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floated for the county to enter into a revenue sharing agreement with the Islanders franchise owner to pay for the issuance of public debt to build the new arena. To evaluate the deal, the Nassau County IDA hired Camoin Associates to analyze the potential economic impacts associated with a new arena. The agency requested that Camoin Associates analyze:

- a) the one-time economic impacts associated with the construction period,
- b) ongoing economic impacts related to spending occurring at the site and to spending by visitors to the site,
- c) sales and hotel occupancy taxes paid by visitors, and
- d) the creation of new businesses and private sector jobs that may be targeted for IDA assistance in the area.

The study found that in total the county would receive an average of approximately \$28.2 million in revenue once the arena opened. Considering the estimated \$26 million in annual debt service payments, the net fiscal benefits to the county amount to approximately \$2.2 million in cash flow because of the project.

To ensure public comprehension of the findings, Camoin Associates has made several visits to Nassau County to assist the IDA with presenting the findings of the study in press conferences and other public meetings.

Project Highlights

- Comprehensive Event Facility Usage and Market Potential Research
- Economic Impact Analysis of Large-Scale Event Center Investment
- Fiscal Impact Analysis of Tax Revenue Generation

CostQuest Associates

CostQuest Associates (CQA) has served as the frontrunner in designing, developing, and implementing economic models for the telecommunications industry. CQA has been engaged in large-scale work efforts with the U.S. Government (Federal Communications Commission and U.S. Department of Commerce), and with U.S. state governments such as Alabama, California, Idaho, Kansas, Wisconsin and Wyoming. CQA assisted the FCC with the development of the National Broadband Plan and currently serves as the model consultant for the Connect America Fund. In addition to these projects in the U.S., CQA has performed similar large-scale data collection and network modeling projects for the governments of Australia, Hong Kong and New Zealand. CQA also develops and maintains models and studies for municipalities to support assessing commercial viability and overall feasibility of broadband deployment scenarios.

CQA provides the modeling, input, training, maintenance, testimony, and witnessing that is required of any model used in advocacy or public hearings.

CQA was formed in 1999 and is headquartered in Cincinnati, Ohio. It is organized as a Partnership/S-Corp. The project will lie within CQA's Network Economic Modeling Group. This project is related to current work CQA conducts for the FCC, City of San Francisco and other projects that call on deep analysis into the economics of broadband.



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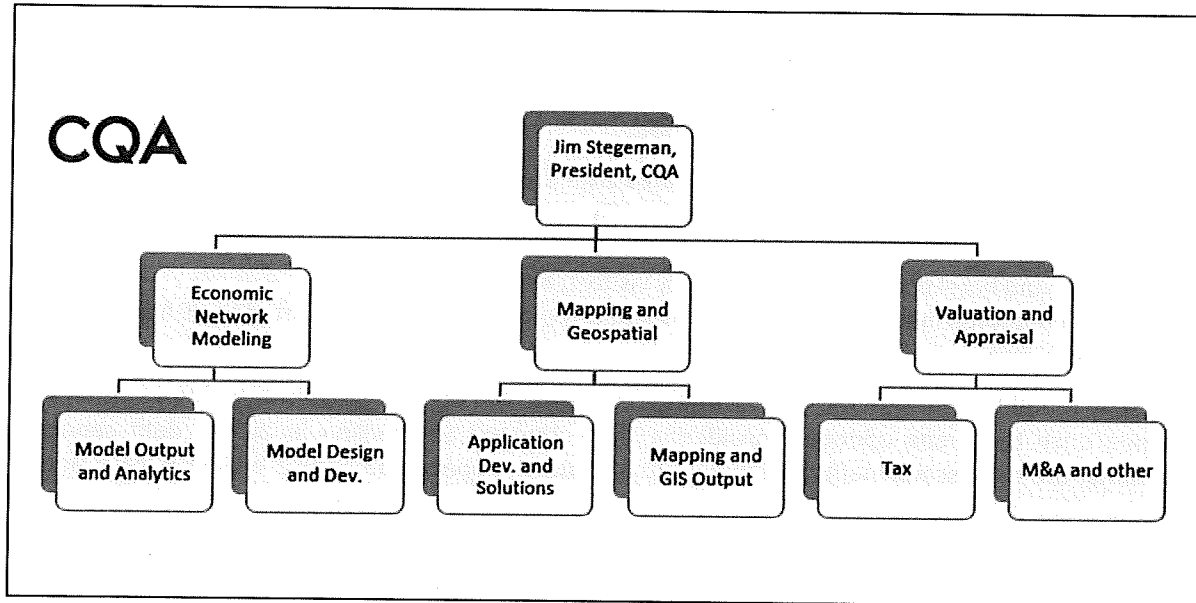


Figure 4 - CostQuest Associates Organizational Chart

CostQuest Experience Examples

State of Kansas (2013 – 2014)

CostQuest has developed city-wide fiber models for 8 cities across the State of Kansas. This work was done under the auspices of the Kansas Commerce Commission. This pilot-program work included feasibility for FTTH deployment for these communities and measuring economic impact because of build-out.

City and County of San Francisco (2015 – Current)

CostQuest developed and continues to update and maintain a full fiber deployment (FTTp) model for residential, business and anchor institution locations across San Francisco. This work, done in concert with the City and County of San Francisco's Department of Technology, serves to answer the following questions:

- Is it economically feasible to build and maintain fiber to the home and business?
- How do the economics of this deployment work for each neighborhood?
- What is the upfront investment to build the network?

The results have provided the basis for a feasibility study to support policy making. The methodology used to model FTTp broadband deployment is based on the same geospatial and economic modeling used to support the Federal Communications Commission and the telecommunications industry.

State of New York (2016 – Ongoing)

CostQuest was retained by the State of New York to model and assess deployment of fiber into underserved communities under the State's \$500mil New NY Broadband Program. CostQuest has



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assessed build costs and established auction bid ranges to support the efficient spend of the programs funds. CostQuest continues to work with the State of New York as new rounds of funding become available.

State of Wisconsin (2013 – Ongoing)

CostQuest has developed city-wide fiber models for 20 cities across the State of Wisconsin. This work was done under the auspices of the Wisconsin Public Service Commission.

State of West Virginia (2013 – 2014)

CostQuest has developed city-wide fiber models for 10 cities across the State of West Virginia. This work was done under the auspices of the West Virginia State Broadband Initiative. Cities such as Huntington and Charleston were studied to assess their viability for FTTH.



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2. References

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Project Name	<i>New NY Broadband Grant Program Application Evaluations & ConnectNY Broadband Program Field Audits</i>
Contact	Jeffrey Nordhaus, Executive Vice President
Address	633 Third Avenue, New York, NY 10017
Organization	NY State Urban Development Corp, d/b/a Empire State Development
Telephone Number	212-803-3515
Email	Jeff.Nordhaus@esd.ny.gov
Contract Term	Dec. 2015 – present

Project Name	<i>Block Island Broadband Feasibility Study</i>
Contact	Michele Spero, Information Technology Manager
Address	16 Old Town Road, New Shoreham, RI 02807
Organization	Town of New Shoreham
Telephone Number	(401) 683-5445
Email	itsupport@new-shoreham.com
Contract Term	April 2015 – present

Project Name	<i>Middlebury Region Broadband Plan</i>
Contact	Jamie Gaucher, Economic Development Director
Address	94 Main Street, Middlebury, VT 05753
Organization	Middlebury Business Development Fund
Telephone Number	(802) 388-8100
Email	jgaucher@townofmiddlebury.org
Contract Term	June 2015 – present



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Camoin Associates

Project Name	Coliseum Economic and Fiscal Impact Analysis
Contact	Paul O'Brien, Counsel
Organization	Nassau County IDA – Phillips Lytle
Telephone Number	(516) 742-5201 x6502
Email	PO'Brien@phillipslytle.com

Project Name	<i>Military Economic Impact Analysis</i>
Contact	Raymond Gillen, President & CEO
Organization	Schenectady Metroplex Development Authority
Telephone Number	(518) 377-1109 x101
Email	rgillen@schenectadymetroplex.org

Project Name	<i>Economic Impact Analysis of Downtown Santa Monica's High-Tech Sector</i>
Contact	Collette Hanna, Community Outreach Manager
Organization	Downtown Santa Monica, Inc.
Telephone Number	(310) 393-8355
Email	collette@downtownsm.com

CostQuest Associates, Inc.

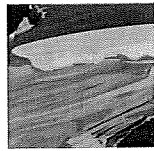
Project Name	<i>National Broadband Plan & Connect America Fund – Economic Model Contractor</i>
Contact	Steven Rosenberg
Address	445 12th Street SW, Washington, DC 20554
Organization	Federal Communications Commission (FCC)
Telephone Number	(202) 418-3614
Email	Steven.rosenberg@fcc.gov



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Project Name	<i>State Broadband Initiative – Lead Contractor</i>
Contact	Kathy Johnson
Address	600 Dexter Avenue, Montgomery, AL 36130
Organization	Office of the Alabama Governor
Telephone Number	(334) 549-1570
Email	Kathy.johnson@obd.alabama.gov

Project Name	<i>State Broadband Initiative – Lead Contractor</i>
Contact	Sarah Klein, Telecommunications Division Administrator
Address	610 N Whitney Way, Madison, WI 53705
Organization	State of Wisconsin
Telephone Number	(608) 266-5481
Email	sarah.klein@wisconsin.gov



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3. Personnel/Staff Qualifications and Experience

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Tilson's project team will consist of five members from its consulting and engineering groups listed below, all full-time Tilson employees. In addition, the Tilson team will be able to draw on additional resources from Tilson's 200+ employees for internal consultation as needed and appropriate.

Christopher Campbell

Chris Campbell, Tilson's Director of Broadband and Energy Consulting, will be the principal consultant for the project and the principal point of interface for the JEDO Board and stakeholders. He leads a team of professionals who provide strategic consulting expertise to states, communities, and firms seeking to improve telecommunications infrastructure and services and manage or develop networks. His work at Tilson encompasses a diverse clientele that includes Empire State Development, the City of Cambridge, Massachusetts, New Shoreham, Rhode Island and the Town of Middlebury, Vermont.

Chris has 20+ years of experience in technology, public policy and community development. Prior to joining Tilson, Chris was the Executive Director of the Vermont Telecommunications Authority (VTA) for almost five years. At the VTA, Chris led efforts to build new fiber networks and expand access to broadband and cellular service. In addition to fiber optic construction and cell site development, Chris had oversight of commercial contract development, grant making, and federal grant seeking. Prior to the VTA, Chris served as Director for Telecommunications and Telecommunications Planner at the Vermont Department of Public Service and Assistant Chief Information Officer for the State of Vermont. As Telecommunications Planner, he designed and facilitated a multi-sector public outreach process as part of the development of the *Vermont Telecommunications Plan*.

He holds a B.A. in Economics and Environmental Studies from the University of Pennsylvania and a Master's Degree in Regional Planning from the University of Massachusetts-Amherst.

David Radin

David Radin is a Senior Consultant in Tilson's Energy and Broadband practice, and has over 13 years of experience across broadband, IT, strategy consulting, and renewable energy. Dave will assist in the validation of the CostQuest model, development and review of the RFI/RFP, vendor negotiations, and report-writing. He is currently the lead consultant for Tilson's New Shoreham, Rhode Island and Somerset County, Maine engagements, and has been a consultant on its Empire State Development and Cambridge, Massachusetts engagements. He is currently advising the Town of New Shoreham in its ISP contract negotiations and recently developed the Round 2 Reverse Auction model for the New NY Broadband Program, a grant round that awarded more than \$200 million. He is a Certified Fiber to the Home Professional by the FTTH Council.

Prior to joining Tilson, David was a Senior Research Manager for Energy & Industrials at GLG, the world's leading platform for professional learning, where he served hedge fund clients across a variety of engagements. David also has experience assisting Wildcat Venture Management, a boutique investment firm, in conducting due diligence for development of microwave low-latency networks connecting North American and European trading centers. Previously, David was a developer of energy facilities – wind farms and coal gasification plants – for Gamesa Energy USA and Process Energy Solutions. He had overall responsibility for development of the 200 MW Minonk wind farm in Minonk, IL, as well as fuel and land procurement for multiple gasification plants to convert petroleum coke to natural gas. David has



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significant prior consulting experience at Everest Group, a boutique strategy firm, as well as system development and IT at Ernst & Young. He has a B.S. in computer science from the University of Illinois at Urbana-Champaign and an M.B.A. from Northwestern University's Kellogg School of Management.

Ellen Manetti

Ellen Manetti will be Tilson's Project Manager for the project. With over twenty-five years of project management and consulting experience, Ellen is one of Tilson's most senior Project Managers. Ellen is a Certified Project Management Professional (PMP) who is widely regarded as an expert and creative leader who consistently meets or exceeds client expectations. Ellen's professional and refined approach to project management has been leveraged by Federal and State Government agencies to manage some of their largest IT contracts. Ellen is currently the Project Manager for Tilson's engagement to develop a broadband plan for a 6-county region of southeast Colorado.

Ellen's experience includes acting as a Program Manager for NASA's Headquarters Information Technology Support Services (HITSS) contract. The HITSS contract that Ellen oversaw included application and software development, systems engineering, server operations, configurations management and control, cable plant and VoIP, cyber security, and customer support and outreach components. Ellen's responsibilities included oversight of both financial and technical performance of the entirety of the HITSS contract service areas. During Ellen's management, the HITSS program met or exceeded all of its quality assurance and delivery metrics. Ellen has also supported JP Morgan in trading floor upgrades throughout the continental US and Latin America, major data center implementations for Sallie Mae, and satellite based taxation automation for the Republic of Indonesia.

Mark Buxton

Mark Buxton is an Outside Plant Engineer with Tilson who will be responsible for the research of fiber network cost factors for validating the CostQuest network model. He has almost 30 years of experience in the telecommunications industry. Specialties include knowledge in the construction and design of systems including Dark Fiber, Hybrid Fiber / Coaxial, and FTTX networks. Mark has been with Tilson for the last 7 years. Recent Tilson projects include: GIS fiber to the premise designs, wireless carrier deployment projects, small cellular site design and site acquisition, and leading large-scale make-ready engineering / structural analysis design teams.

Andrew Ludwick

Andrew Ludwick is an Engineering Manager with Tilson and will be responsible for the development of a high-level wireless design and cost estimate. He leads a team of talented engineers and technicians who provide networking, cellular, RF, and Smart Grid and IoT design and installation to government, industry, and utility customers. Prior to joining Tilson in February 2017, Mr. Ludwick served more than 20 years in the U.S. Army, in telecommunications positions of increasing rank and responsibility. He retired with a rank of Command Chief Warrant Officer, the highest rank achievable for a Warrant Officer. Over his military career, Mr. Ludwick worked with a variety of network systems and technologies in providing secure and robust communications facilities in places as diverse as Afghanistan to the Pacific Rim, and culminating in a position developing next-generation communications networks for the Joint Communications Support Element, tasked by the Joint Chiefs of Staff to support telecommunications needs for all U.S. forces worldwide.



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Camoin Associates

Michael N'dolo, CEC

Michael N'dolo is Vice President at Camoin. Michael's understanding of the relationship between development and municipal finance, as well as his experience leveraging the benefits of commercial and industrial tax incentives, brings a vital financial perspective to the firm's economic development planning projects. His recent work includes a comprehensive cost/benefit assessment of one of the largest high tech/R&D facilities proposed in New York State.

Of particular interest to Michael is working with communities to better understand the fiscal implications of their planning efforts, both comprehensive plans and economic development strategic plans. Michael's ability to help communities recognize the likely impact of various economic development initiatives on an "average" taxpayer has been an invaluable asset to the firm as Camoin Associates works to develop economic development strategic plans that are based in reality and fully implementable.

Michael has successfully completed professional training in IMPLAN and LOCI, computer modeling systems for economic and fiscal impact analysis, and is currently the only economic development professional in New York State utilizing these combined programs to assess an economic development project's impact on a locality's municipal tax revenue. Michael has presented the firm's economic and fiscal impact modeling methodology at conferences of the New York State Economic Development Council (EDC), Wisconsin Economic Development Association, the New Hampshire Economic Development Association, as well as at regional conferences such as the New England Economic Developers Association. His work has been cited in *The Wall Street Journal*, *The New York Times*, and *Forbes*, and has been featured in segments of National Public Radio's *Marketplace* show.

Michael has a Master of Public Administration degree from the Maxwell School of Syracuse University. Prior to working at Camoin Associates, he was involved in facilities planning at the University of Minnesota.

Rachel Selsky, AICP

Rachel Selsky is a Senior Economic Development Specialist at Camoin. During the last nine years, Rachel's experience at Camoin Associates has included the completion of community and economic development strategic plans, market analyses, meeting facilitation and community consensus building, tax credit program administration and technical assistance, grant writing/administration, and community consolidation studies. With a passion for consensus building and community education, Rachel's ability to present highly technical topics in a clear and concise manner has helped the firm better reach out to local residents and policy makers to assist them in making informed decisions regarding their future.

Rachel's most recent focus at Camoin Associates has been the completion of multiple economic and fiscal impact analyses for private, public and non-profit entities looking to better understand their value in terms of jobs, wages and sales within the local economy. Specifically, Rachel's impact analysis work has assisted multiple companies in their application to local IDA's for tax incentives. In these tough economic times, this work has become critical for businesses and developers needing to clearly demonstrate the positive economic impact their proposals have on a local economy and public finances.

Rachel holds a Masters in Regional Planning from the University at Albany. In addition to a Master's degree, Rachel is certified through the American Planning Association and the National Charrette Institute. Rachel's background also includes facilities planning for the New York State Department of



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Corrections as well as work with the Planning Bureau of the New York State Office of Parks, Recreation and Historic Preservation. Rachel also holds a Bachelor of Arts in Urban Studies and Planning from the University at Albany.

Tom Dworetsky, AICP

Tom Dworetsky is an Economic Development Analyst at Camoin. Since joining the Camoin team, Tom has completed numerous economic and impact analyses, real estate market analyses, supply chain studies, and economic development strategic plans. His work has included quantifying the economic impacts of complex policies and projects, building pro forma financial statements for multi-million-dollar developments, and conducting regional and site-specific real estate market analyses for a range of communities and use types.

Tom's prior experience as a land use planning consultant serves as a valuable foundation for tackling economic development problems in communities with unique land use and zoning challenges. Tom has a special interest in strategies for downtown revitalization and the positive economic and social impacts that reinvigorating historic town centers can have on communities. Taking a data-driven approach, Tom has developed innovative, community-specific initiatives to spur revitalization through redevelopment, historic preservation, adaptive reuse, and other creative methods.

Tom earned his Master of City and Regional Planning degree from the University of North Carolina at Chapel Hill, where he specialized in Real Estate Development and Placemaking. He also holds a Bachelor of Science in Business Administration from Boston University and is a member of the American Institute of Certified Planners (AICP). Tom has been a guest lecturer on Economic Impact Analysis for courses at the University of Albany and Siena College.

CostQuest Associates, Inc.

CostQuest, utilizing two of the firm's principal members, Jim Stegeman and Mark Guttman, will supply the Gigabit Cities Model to the engagement, make modifications based on the Tilson validation, and assist with the running business model scenarios.

James Stegeman

James Stegeman is the President of CostQuest Associates, Inc. As an Executive of the company, James has total responsibility for the company (P&L, staffing, strategic plan, etc.). In addition to this role, James leads the product development for the company. James formed CostQuest Associates, Inc. in 1999. Prior to CostQuest, James worked in a variety of positions at INDETEC International, the last of which was Executive Vice-President. He joined INDETEC in 1995. Prior to INDETEC, he spent 7 years in a variety of Financial and Regulatory management positions with Cincinnati Bell Telephone. James led the design, coding and implementation of the CostPro platform, the FCC's National Broadband Plan model (BAM) and the Connect America Fund model for High-Cost Funding (CACM). CostQuest models have been approved by federal authorities, multiple state commissions and are in use by multiple carriers with operations in over 40 states. James has been a major force behind the development of the latest generation network cost models used by wireline and wireless companies and state and government agencies in support of broadband deployment analysis (telco, cable, wireless and satellite), network valuations, and UNE (Unbundled Network Element) and USF (Universal Service Fund) proceedings.



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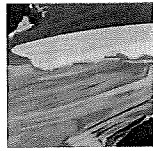
Mark Guttman

Mark Guttman, an associate of and partner in CostQuest, heads up CostQuest's Geographic Information Systems efforts, Quality Assurance, Testing, and Documentation. He also provides assistance in Customer Support, System Design and Project Management. Prior to his work with CostQuest, Mark was an Analyst with INDETEC International. As such, he has worked in the telecommunications industry in a variety of roles related to cost modeling. His efforts have been focused on the development or review of a number of domestic and international cost models. These include the BellSouth Telecommunications loop model (BSTLM), GTE's Integrated Cost Model and the Base Cost Proxy Model (BCPM). He was also involved in the development and testing of the Australian National Universal Service Cost Model (NUSC). In addition to development efforts, Mark also worked on the review of the United States Federal Communication Commission's Hybrid Cost Proxy Model. Mark led the geospatial design of the FCC's National Broadband Plan model (BAM) and the Connect America Fund model for High-Cost Funding (CACM) among many others. He also leads to data development efforts related to broadband mapping in several states.



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Team Resumes



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CHRISTOPHER CAMPBELL RESUME

47 Court Street, Montpelier, VT 05602 | 802-793-5439 | ccampbell@tilsontech.com

EDUCATION

UNIVERSITY OF PENNSYLVANIA

Bachelor of Arts (Economics and Environmental Studies)

Philadelphia, PA
1993

- Phi Beta Kappa
- Magna Cum Laude with Distinction in Environmental Studies
- Benjamin Franklin Scholar

UNIVERSITY OF MASSACHUSETTS

Master of Regional Planning

Amherst, MA
1995

- American Institute of Certified Planners Planning Student Award

UNIVERSITY OF DENVER

Coursework, Information Industry Finance

Denver, CO
2000

SNELLING CENTER FOR GOVERNMENT

Vermont Leadership Institute

Burlington, VT
2006

PROFESSIONAL EXPERIENCE

TILSON

Director of Broadband and Energy Consulting

Principal Broadband Strategist

Portland, ME
2015 – Present
2015

- Provided strategic consulting expertise to states, communities, and firms seeking to improve telecommunications infrastructure and services and manage or develop networks.

VERMONT TELECOMMUNICATIONS AUTHORITY

Executive Director

Montpelier, VT
2010 - 2015

- Provided executive leadership for a state-chartered authority responsible for developing and funding infrastructure for broadband and cellular services in unserved areas.
- Built and managed a lean team capable of diverse activities, including fiber optic construction, cell site development, commercial contract development, grant making, and federal grant seeking.
- Developed programs and defined strategies for the Authority to achieve its objectives.

VERMONT AGENCY OF ADMINISTRATION

Assistant Chief Technology Officer

Economic Stimulus and Recovery Office Director of Network Infrastructure

Deputy Commissioner of Information & Innovation/Assistant CIO

Montpelier, VT
2009-2010
2009
2005

- Advised appointed and elected officials on telecommunications and energy policy.
- Developed and implemented successful strategies to bring competitive ARRA funding in energy and telecommunications to the State of Vermont.
- Managed day-to-day operations in state enterprise information technology department.

VERMONT DEPARTMENT OF PUBLIC SERVICE

Director for Telecommunications

Telecommunications Planner

Senior Consumer Affairs and Information Specialist

Consumer Affairs and Information Specialist

Montpelier, VT
2005-2009
2000-2005
1998-2000
1997-1998

- Successfully crafted and championed reforms to adapt state telecommunications policy and regulation to changes in the telecommunications industry due to competition and technological change.
- Provided expert testimony before the Vermont Legislature and Public Service Board.



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- Wrote, advocated for, interpreted and implemented public policy documents including legislation, regulations, and plans.
- Negotiated on behalf of public agencies with utilities and other companies.

CASTLETON STATE COLLEGE

Telecommunications Planning Project Coordinator

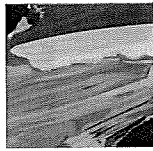
Castleton, VT

1995-1997

- Coordinated a grant-funded, multi-party regional telecommunications planning effort for Rutland County, Vermont and wrote the plan document.

ADDITIONAL INFORMATION

- **Good Samaritan Haven, Barre, VT:** Board of Directors, 2007-2012
 - Chair of 2008-2009 Capital Campaign Committee
- **Vermont Public Safety Broadband Network Commission:** Member, 2013-2015



TILSON

David Radin

Senior Consultant – Tilson | E-mail: dradin@tilsonotech.com | LinkedIn: <http://linkedin.davidradin.com>

Collaborative leader with a lifelong passion for technology. Diverse experience includes consulting, software development, alternative energy, financial modeling, and MBA from Kellogg. Certified Fiber to the Home Professional by the FTTH Council Americas.

EXPERIENCE

Tilson – Senior Consultant **Portland, ME** **2015 – Present**
Tilson is a full service telecom support firm providing consulting, owner's engineering, and construction support.

- Advise municipalities on strategies for improving broadband access. Technologies contemplated include fiber, DSL, microwave, and other wireless.
- Conduct competitive analyses of target markets, financial modeling of proposed fiber networks, and write client reports.
- Clients include the City of Cambridge, Massachusetts; Town of New Shoreham, Rhode Island (coterminous with Block Island); and CEI Capital Management.

GLG – Senior Research Manager **New York, NY** **2013 – 2015**
Member of the firm's Energy & Industrials practice. GLG is the market leading membership-based expert network consulting service that connects its over 1,000 clients with its global network of 400,000 consultants for transactional engagements.

- Managed client service for an \$8m book of business comprised of Energy & Industrials hedge fund clients. Increased client activity 122% since assuming responsibility for this book. As Lead Research Manager for a key client, developed and implemented a client engagement strategy to increase usage by 30%.
- Developed new business analytics tools to track client engagement and key metrics for the Energy & Industrials research team. Provide weekly updates to senior leadership.
- Assisted in the sales and new prospect identification process by attending sales meetings and providing pre-sales service, which has successfully added 1 new client to GLG.

Independent Consultant **New York, NY** **2012 - 2013**
Wildcat Venture Management
Supported private equity firm's diligence in an investment in low latency microwave networks for high frequency trading.

- Developed, fine-tuned, and presented financial model that supported the firm's \$20m acquisition of multiple proposed low latency network links between US, Canadian, and European trading hubs.
- Supported client in diligence process in acquiring an incumbent network services provider.

CreativeWorx

Technology consultant at the startup provider of TimeTracker, a cloud-based solution for billable professionals to automatically capture time worked on a per-project and per-client basis.

- Performed comprehensive technical architecture review of third party product APIs for potential integration with TimeTracker.
- Developed integration proofs of concept for selected platforms using JQuery and JavaScript.

Everest Group – Senior Consultant **New York, NY** **2011 – 2012**
Recruited to join the Energy and Next Generation IT practices of this boutique outsourcing consultancy.



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- Served client CFO in developing financial model for IT services at a major healthcare provider to verify market competitive pricing. Identified cost savings amounting to 15% of expenditures.
- Conducted market entry study in the insurance industry for a Tier 1 Global Services Provider.
- Facilitated client training session on sourcing strategy and relationship management.

Independent Consultant

Chicago, IL

2010 - 2011

Statera Capital, LLC

Consultant to a boutique consultancy and private equity firm formed to guide clients in globalization concerns.

- Wrote business plans & developed financial models for a solar development firm in Liberia, Africa, and a proposed waste-to-energy facility and a catering company in Ghana, Africa. Articulated project fundamentals to local stakeholders via Skype.
- Identified and acquired land rights for 25 MW of solar photovoltaic projects. Prepared and submitted bids for energy sales.
- Developed privatization business plan for a former Ghanaian state-owned airline catering company.

Gamesa Energy USA – Senior Project Developer

Chicago, IL

2008 – 2010

US arm of a publicly-traded Spanish wind turbine manufacturer. Introduced rigorous financial modeling of projects and selected company-wide financial modeling software solution. Trained developers in principles of discounted cash flow analysis and use of financial model. Started company's Chicago office. Served as local office IT contact.

- Oversaw development of a 200 MW Illinois wind farm with capital budget of \$375m.
- Identified \$4m in cost savings and 14% increase in revenue by rigorously managing the development process with a virtual cross-functional team.
- Led power sales process for 3 wind projects totaling 350 MW.

Process Energy Solutions, LLC – Project Manager

Patterson, NY

2005 – 2008

Startup developer of coal gasification, wind generation, and solar PV facilities founded by former Texaco executives. Company received \$400m of venture capital from D.E. Shaw and Goldman Sachs for project development.

- Developed business case and maintained cash flow analyses of coal gasification plants and large scale wind power plants used by financial backers in investment decisions.
- Managed CO₂ strategy, fuel procurement, and public relations for \$1.8b gasification project to produce natural gas in New York State. Negotiated land acquisition for a separate \$1.8b gasification project in Texas.
- Standardized company IT platform offerings for employee computing needs.
- Wrote winning application for a \$250,000 grant from New York State Energy Research & Development Authority.

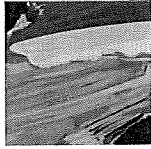
CAP GEMINI ERNST & YOUNG - CONSULTANT

San Francisco, CA

2000 – 2003

Big Five IT consulting firm; provided services for clients in insurance and energy industries.

- *Chevron Texaco:* Led client team to produce discrete pieces of overall software development project that streamlined procurement of IT services for 60,000 client personnel worldwide. Identified inefficiencies with existing client IT process, gathered requirements, and developed solution.



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- *Portland General Electric*: Conducted tests on a new billing system and facilitated client training sessions.
- *Cigna Insurance*: Verified and cross-referenced billing and claim records to ensure accurate data input for new systems.

EDUCATION

M.B.A. – KELLOGG SCHOOL OF MANAGEMENT, NORTHWESTERN UNIVERSITY EVANSTON,
ILLINOIS 2005

B.S. *CUM LAUDE*, COMPUTER SCIENCE – UNIVERSITY OF ILLINOIS URBANA, ILLINOIS 2000

CERTIFICATIONS & ADDITIONAL INFORMATION

- Certified Fiber to the Home Professional by the FTTH Council Americas
- Proficient in French and basic knowledge of Spanish.
- Interests include travel, Linux, and photography.



TILSON

Mark A. Buxton

mbuxton@tilsontech.com

EXPERIENCE

Tilson Technology Management, Project Manager, Senior Outside Plant Engineer April 2010 – Present

- Responsible for the Geographical Information Systems integral to Tilson's fiber-optic infrastructure & construction management practice, including; developing procedures for information transfer with GIS services vendors, and for large-scale attachment applications to utility pole owners
- Provides direct client-facing consulting for all aspects of client projects including construction of the Three Ring Binder Project
- Responsible for a team of technicians providing make-ready engineering and structural analysis for purposes of deploying fiber optic cable. Projects included 10,000 poles in the state of Kentucky
- Works closely with Tilson's field data collection system and proprietary database to develop project specific procedures

Kennedy Network Services, Aerial Construction Crew Foreman 2008 – 2010

- Supervised construction of hybrid coaxial / fiber networks. Duties included designing, planning, and building fiber optic cable routes, supervising contracted, and in-house crews, reviewed production reports/invoices, coordinated materials between crews and warehouse

Broadband Communications Unlimited, Inc, Owner/ VP 2000 - 2007

- Performed a wide range of duties in addition to the general business requirements of operating a successful incorporation including day-to-day supervision of Employees and Sub-Contractors, and detailed billing and invoicing. Major customers included: Time Warner Cable, Bellsouth, State of North Carolina, Long Island Fiber Exchange, and Time Warner Telecom

Time Warner Cable Construction Division, Construction Supervisor, Aerial Construction Crew Foreman 1993-2000

- Supervised construction of strand and fiber. Duties included Cad based designing, planning, and building fiber optic cable routes, supervising contracted, and in-house crews, reviewed production reports/invoices, coordinated materials between crews and warehouse

Lucas Tree Experts, Crew Foreman 1989 – 1992

- Supervised construction of telephone and transmission power line construction.
- Implemented projects within national safety codes as well as aerial and underground clearance



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specifications and worked with government agencies, and other utilities in dealing with these issues.

PROFESSIONAL CERTIFICATIONS/AFFILIATIONS

National Cable Television Institute Certifications: Installer, Installer Tech, Service Tech.

DragonWave: Installer

Alcatel Lucent: Small Cell Installation

Belden: IBDN Project Management

Osmose Utility Services: O-Calc Pro Comprehensive Pole Load Analysis



TILSON

ELLEN MANETTI – EMANETTI@TILSONTECH.COM

PROFESSIONAL SUMMARY

Expert and creative leader with multiple successes in leading technology services organizations while meeting and exceeding customer expectations and organization financial objectives. Twenty-five years of experience managing all aspects of Software Development, Product Development, Channel Management, Software as a Service, Information Technology, Customer Support, and Quality Assurance. Innovative and versatile management approach has provided continuous improvement solutions in the areas of human resource management, customer service, financial, scientific, and social media applications and products. Experience also includes network engineering, information assurance & cyber security, and automation of development and testing infrastructure. Success includes product and service delivery for federal agencies, state and local governments, banking and finance, telecommunications, hospitality, insurance, manufacturing, publishing, and not-for-profit sectors throughout North and South America, Europe, and Asia.

WORK EXPERIENCE

Senior Consultant

2015 - Present, Tilson, Portland, Maine

Senior Project Manager – Otero County Broadband Strategy

- Provide project management, quality assurance, and governance to seven-month effort to develop strategic plan for expanding high-speed broadband service throughout six counties in the southeastern section of Colorado.

Senior Project Manager – Syngenta AG Next Generation Network Design

- Provide project management, quality assurance, and governance to multi-phase project for the analysis and high-level design of high-speed broadband solutions. A global corporation, Syngenta's corporate data networking requirements range from basic office connectivity for remote sales offices to extensive movement of big data from regional research and development sites to central processing locations. The Tilson team's activities included identifying potential providers for local high-speed connections, gathering competitive pricing, national and international premise surveys, national and international market studies, high level design, and implementation planning for the global build-out.

Tilson Internal

- Provide corporate and contract leadership for business development and customer support including updates to federal contracts with the General Services Administration (GSA) and US Navy (Seaport-e).

Program Manager

2011-2014, InDyne, Inc., Reston, Virginia

Corporate Program Manager

- Provided corporate and contract leadership for Department of Defense service provider encompassing all aspects of information technology delivery as well as support for internal initiatives in CMMI and ISO certifications.
- Introduced robust product management procedures for PIMS360 14 module contract management product. Actions included roadmaps and processes for prioritized product development and release



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management, integration CMMI-DEV processes with agile development techniques, Intellectual Property protection, and government mandated Information Assurance and Cyber Security.

- Served as corporate advisor to all InDyne contracts in design, development and implementation efforts associated with communications, IT, engineering processes and service provisioning. Performed strategic planning relative to engineering and IT tools and capabilities across all InDyne contract areas. Recent initiatives included the development of Cyber Security capabilities and process improvements to support AS9100, and CMMI-DEV Level 3 certification.

Program Manager, NASA Headquarters Information Technology Support Services (HITSS) (2011- 2012):

- IT Support contract that included application and software development, systems engineering, server operations, configuration management and control, cable plant and VoIP, cyber security, and customer support and outreach. Responsibilities included oversight of both technical and financial performance for this 200+ IT contract that consisted of 42 individual task orders in support of NASA HQ IT and Mission Directorate functions. Managed program for the integration of both associated contracts and over two dozen subcontractors to meet program goals and expand customer presence. Applications, solutions, and products supported included a collaborative science portal, multimedia educational applications and products, and multimedia and communications services in support of space shuttle, satellite and Mars Rover launches. Additional activities encompassed database upgrades to support over 100 applications, development and execution of compliant Cyber Security processes and programs, implementation of IBM Rational collaborative development tools and Agile Development Processes. During this period, the HITSS program met or exceeded its quality assurance and delivery metrics. Despite significant budget reductions, the HITSS program maintained a record of excellent customer service while also meeting stringent cost management requirements.

President/Founder

2002-2015, Wyndlogic, Inc., Alexandria, Virginia

- Provided strategic redesign and implementation of IT Governance, Organizational Design and PMO services for a major Financial Securities company executing a groundbreaking conversion of 6 terabytes of data in a 3-day window. Activities and responsibilities encompassed the redesign and redevelopment of risk management, status reporting, and success measurement for every aspect of this effort. Overall responsibilities included the development of planning & forecasting programs, quality assurance and testing improvement, process improvement and automation, staff assessment, and training and development. As implemented, the PMO costs were reduced by 30% while the volume of work increased 300%.
- Established multi-year relationship with major Mortgage Bank in the areas of Quality Assurance, Program Management, Testing, and Training. Highlights include: the strategic redesign of testing processes to include automation which reduced test execution times by 90% and costs by 35% while improving early stage defect detection by 50%; leadership of 60 person QA team for in support of systems for Investments & Capital Markets group; and creation of PMO for \$35M financial systems development effort.
- Provided strategic redesign and implementation of IT Governance for HR-Management ASP to meet release deadlines, quality goals and help-desk response time metrics. Success was achieved by fostering inter-team and intra-team cooperation, advancing a culture of transparency through clearly defined and reported metrics for estimating, tracking, and evaluating work, and proper utilization of Agile development techniques and processes.



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- Improved project on-time and on-budget delivery and overall customer satisfaction by 50% for a technology consulting start-up through custom developed a program management function that encompassed project management, controls, assessment standards, and procedures.

Senior Vice President

2001-2002, Hitachi Innovative Solutions Corp, Bethesda, Maryland

- HISC acquired Virtuallogic, Inc., in 2001. The newly acquired company became the Mid-Atlantic operating region responsible for 80% of the corporation's revenue. During the transition period, adhered to established financial budgets and targets while supporting the transition of the Virtuallogic regional organization into the national HISC Company. Continued to foster innovation and creativity resulting in the addition of wireless technology capabilities and the creation of management consulting capabilities in industry verticals.

Vice President

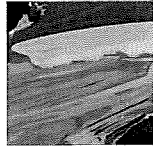
1998-2001, Virtuallogic, Inc., Bethesda, Maryland

- Lead 125 person technology services organization in delivering to customers in Insurance, Financial Services, Health Care, Hospitality, Media, and Federal Government. Directly supervised Manager and Director level staff. In 2001, Virtuallogic was acquired by HISC and became its Mid-Atlantic operating region responsible for 80% of the corporation's revenue.
- Achieved consistent project success and customer satisfaction reviews in the 90 percentiles through leading edge project management, quality assurance and customer engagement and feedback techniques.
- Worked with customers and business development to refine and improve service offerings resulting in increased customer commitments and growing professional staff growing from 70 to 125 over the course of thirty months.
- Reorganized product development team to focus on customer feedback, quality assurance, and timely delivery. Successfully increased customer satisfaction from 70% to 90%, sales by 30%, and overall ROI from negative to positive.
- Architected a culture of empowerment and accountability through the creation of PMO and Governance functions including policies, procedures, methodologies, and metrics. Provided clear definition of expectations and goals as well as feedback and insight into operations, projects, and individual performance.
- Sponsored a service offering expansion program that brought together thought leadership from the sales, marketing and client services that increased the portfolio of technical and delivery offerings by 400%. Expanded Microsoft centric application development and network integration practices to include Strategic IT Planning, Enterprise Infrastructure and Security, e-business application development, business intelligence, CRM, ERP and Enterprise Application Integration.
- Established formal skills assessment, training and development programs to ensure a consistent and reliable pool of highly skilled delivery staff.
- Critically evaluated business plans, budget guidelines, and resource constraints to focus effort based on formal prioritization and risk assessments by management team.

Principal

1995-1998, HCL-James Martin, Fairfax, Virginia

- Designed and developed database product used to collect and categorize Year 200 vulnerabilities across customer applications and infrastructure that was used on all Year 2000 efforts.



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- Managed 25% of the corporation's revenue from professional services and led multiple teams ranging from 3 to 30 professional staff concurrently.

Director

1991-1995, Bell Atlantic Network Integration, Falls Church, Virginia

- Managed a portfolio of national and international clients in support of network implementation, network-based applications and outsourcing.
- Highlights include: National implementation of five data centers to support call center operations for a major financial institution, this was the only aspect of the larger program to complete on-time and on-budget; and a nine-month assignment in the Republic of Indonesia to design and pilot a hotel and restaurant tax collection system. The pilot implementation increased sales tax collection by 400%.

Senior Consultant

1986-1991, Accenture, Washington, D.C.

EDUCATION

- Master of Business Administration, Georgetown University
- Bachelor of Arts, English Literature – Colgate University

CERTIFICATIONS

- Project Management Institute, Certified Project Management Professional
- Scrum Alliance, Certified Scrum Master



TILSON

Andrew Ludwick

Aludwick@tilsontech.com

Experience

Tilson

Engineering Manager

February 2017 - Present

Lead a team of talented engineers and technicians who provide networking, cellular, RF, and Smart Grid and IoT design and installation to government, industry, and utility customers.

United States Army

Command Chief Warrant Officer at Joint Communications Support Element

December 2015 - January 2017

JCSE is one of the most unique and important units in the Department of Defense. Tasked directly by the Joint Chiefs of Staff to support the Joint Warfighting commands around the world, as well as the Special Operations Command's deployed missions, with perhaps it's most important mission being it's mandate to innovate for the DoD. In this capacity the unit is given extensive latitude to work directly with industry and drive future IT innovation DoD wide. This has led directly to the DoD's adoption of technologies such as single channel TACSAT, and everything over IP (EoIP). My role was to call on my extensive experience within the DoD to steer and drive this innovation. To do so I worked with counterparts around the world to assess emerging needs. I then would work with our team of engineers to engage with commercial vendors and industry to meet these needs. In this capacity we were continually at the cutting edge of bringing the best and brightest of commercial off the shelf (COTS) technologies to the DoD.

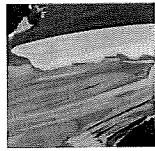
Senior Network Management Technician at US Army

July 2014 - December 2015

Served as the Senior Network Management Technician for an Army Corps headquarters G6 Communications Directorate. I Corps is a certified Joint Task Force (JTF) command expeditionary headquarters that executes unified land operations in support of worldwide contingencies and builds coalition relationships across the Pacific. I was responsible for engineering strategic and tactical wide area networking services, coalition networks, and Installation As a Docking Station (IADDS) network transport for the I Corps Early Entry Command Post (EECP), Main Command Post, and Rear Command Post. An expert with multiple WAN, LAN, and security technologies who is responsible for maintaining a network infrastructure that includes nodes across the Pacific Ocean in countries including Australia, Japan, and Korea, developing annexes for the Corps' plans and orders to support the mission command system capabilities and collaborative framework in a JIIM environment.

Network Management Technician at US Special Operations Command (SOCOM)

January 2014 - June 2014



TILSON

Primary Network Management Technician tasked with planning and coordinating network and automations support, Video Teleconferencing, circuit actions and troubleshooting for the National Capital Region in

support of a Four-Star Joint command. Area of responsibility spans the Washington DC, Maryland, and Northern Virginia areas; and encompasses numerous remote nodes and users.

Senior Network Operations Technician at NATO Special Operations Component Command - Afghanistan

January 2013 - January 2014

Senior Network Technician for Special Operations Component Command – Afghanistan (SOJTF-A) / NATO Special Operations Component Command – Afghanistan (NSOCC-A); responsible for providing robust and reliable voice, video and data communication services to the senior Special Operations Commander and

staff in Afghanistan. Serves as the senior SOF network technician to 4 subordinate SOF HQs comprised of more than 31,000 US, NATO and partner-nation special operations personnel across Afghanistan.

Provides sound technical guidance to directorate staff in the development of recommendation to the Communications Director on capabilities, limitations and employment considerations of terrestrial and space-based communications systems employed throughout the combined joint operations area.

Network Management Technician at Joint Forces Headquarters National Capital Region

May 2012 - December 2012

Chief Network Engineer responsible for network planning, installation and sustainment for the J/G6 Joint Headquarters-National Capitol Region and Military District of Washington (JFHQ-NCR/MDW). A joint command tasked with homeland security and defense of the Washington D.C. area as well as surrounding counties in Virginia and Maryland. Responsible for translating mission requirements into information systems architecture. Designs, implements, tests, and deploys network architecture for Local Area Networks (LAN), and secure LAN subscribers over a large geographical area for over 1,000 users. Conducts research on emerging technology and recommends methods to integrate them into the current architecture to enhance future operational capabilities for the command.

Cyberspace Defense Technician at White House Communications Agency

May 2011 - May 2012

Tasked with providing the President of the United States of America (POTUS) with information confidentiality, integrity, and availability 24/7. Performed and supervised the network defense, network compliance, and security information and event management operations across the White House Communications Agency's 4 networks and over 3000 users. Agency lead for designing, installing, and integrating into existing infrastructure the cutting edge cyber defense systems necessary to enhance existing capabilities. Collaborated with other agencies within presidential community of interest as well as other inside the intelligence and defense communities on all cyber defense matters. Officer in charge of communication support to POTUS at event sites around the world.



TILSON

Officer In Charge at SACEUR Communications Team

June 2008 - May 2011

Served as officer in charge of communications team providing worldwide command, control, communications, and intelligence to the Supreme Allied Command Europe/United States European Commander (SACEUR/USEUCOM). Provided mobile communications via airborne, ground-mobile, sea-mobile, and stations support to the office, official residence, and traveling footprint of the SACEUR. Oversaw a staff of twenty-five joint communicators (Army, Navy, Air Force).

Network Management Technician at 39th Signal Battalion

July 2006 - June 2008

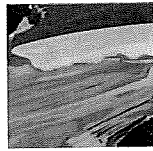
Network Management Technician at Combined Joint Task Force 76

January 2004 - February 2005

Education

University of Maryland University College

Bachelor's Degree, Management Information Systems and Services, 2004 Grade: 3.4



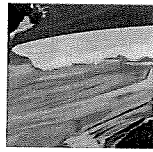
TILSON

Camoin Associates

Michael N'Dolo, Camoin Associates

Project Experience - Economic & Fiscal Impact Analysis

- **City of Bangor, ME** | Impact Study of New Convention Center and Arena
- **Northampton County, PA** | County and Regional Economic Development Investment Assessment
- **ADK Action** | Economic Impact Analysis of Rail Extension vs Bike Path Development
- **New York Sire Stakes** | Economic Impact of Horse Racing on New York State
- **City of Lockport** | Economic Impact of the Flight of Five Tourism Destination
- **Bangor, ME** | Economic Impact Analysis of Event Center Rehabilitation Project
- **Shore Development Partners** | Economic Impact Analysis of a Waterfront Project in Long Beach, NY
- **BBL Development Group** | Economic Impact Analysis of the Vista Technology Center
- **City of Painesville** | Economic & Fiscal Impact Study of the LakeEast Hospital Relocation
- **City of Northampton, MA** | Economic and Fiscal Impact Study on the Proposed MGM Springfield Casino
- **Cooperative Tug Hill Council** | Economic Impact of ATV Usage on the Tug Hill Region
- **First Columbia, LLC** | Saratoga National Resort Economic Impact Report
- **Highbridge Commercial Development** | Stanford Crossings Fiscal Impact Study
- **Horizon Wind Energy** | Economic & Fiscal Impact Studies (2) of a Wind Farm
- **Lifetime Fitness** | Economic Impact Report
- **Logistics One** | The Esplanade Fiscal Impact Report
- **Long Island Power Authority** | Impact Analysis on the Installation of an Offshore Wind Farm
- **Lowe's Home Centers, Inc.** | Various Economic Impact Studies
- **Lunar Module** | Movie Studio Economic Impact Assessment
- **Massullo Brothers Builders** | Kensington Woods Fiscal Impact Study
- **Nassau County Industrial Development Agency** | Various Economic and Fiscal Impact Studies
- **Nevele Investors, LLC** | Economic and Fiscal Impact Study of a Casino
- **Newman Development Group** | Economic and Fiscal Impact Study
- **New York Islanders** | Major League Hockey Arena Impact Study
- **New York Power Authority** | Impact Analysis on the Offshore Wind Energy Cluster on New York State and the Great Lakes Offshore Wind Initiative
- **Nigro Partners, LLC** | Temple Farms Mixed Use Impact Report
- **NYS Funding, LLC** | Economic and Fiscal Impact Study of a Casino
- **Town of Bethlehem** | Fiscal Impact Study
- **Town of Clifton Park** | Fiscal Impact Study
- **Trudeau Institute** | R&D Economic Impact Study



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- **Walkway Over the Hudson** | Economic Impact Study

Rachel Selsky, AICP, Camoin Associates

Project Experience – Economic Impact Studies

Major Mixed Use Economic Impact Studies

- **Seneca Place** | Economic and Fiscal Impact Analysis of a major mixed use project on the Town of Seneca, NY
- **RXR Garvies Point** | Economic and Fiscal Impact Analysis of a major mixed use project on the City of Glen Cove, NY
- **Wilmore, Inc** | Economic and Fiscal Impact of Park Point Student Housing Complex
- **Hudson Valley Wine Village** | Economic and Fiscal Impact of Mixed Use Development
- **Town of Islip IDA, NY** | Economic impact analysis of a \$4 billion mixed-use development on Long Island

Tourism Economic Impact Studies

- **Islanders Hockey Arena Project** | Economic Impact of Visitors on Nassau County, NY
- **City of Northampton, MA** | Economic Impact of the MGM Springfield Casino
- **Capital Culture** | Impact of Arts Organizations on the Albany County Economy
- **Catskill Mountain Rail Trail** | Economic Impact of Recreational Tourism
- **Town of Camden, ME** | Economic Impact of Recreational Tourism at the Snow Bowl
- **Friends of Old 7** | Economic Impact of Recreational Tourism
- **Erie Canal National Heritage Area** | Impact of Visitor Spending Associated with Cultural Tourism
- **Walkway Over the Hudson** | Economic Impact of Recreational Tourism
- **NYS Funding LLC** | Economic Impact of a Casino in the Capital Region of NYS
- **Empire State Development** | Economic impact analysis of a rail vs trail scenario for a rail corridor in the Adirondacks
- **Vermont Trails and Greenways Council** | Economic impact analysis of trails on Vermont
- **Saratoga County Agricultural Society** | Economic impact of the Saratoga County Fairgrounds

Other Economic Impact Studies

- **Town of Hempstead IDA** | Economic & Fiscal Impact Study on Green Acres Mall project
- **X-Cell III Realty Associates, LLC (developer)** | Economic & Fiscal Impact Study for an Office Project on Long Island
- **Horizon Wind Energy** | Economic & Fiscal Impact Study of Wind Farms
- **Lifetime Fitness** | Economic Impact Report for New Project Location in Nassau County, NY
- **REP South Service Road, LLC (developer)** | Economic Impact of Office Project on Nassau County, NY



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- **Film Industry Impact** | Economic Impact of the Film Industry on Nassau County, NY
- **Saratoga Economic Development Corporation** | Economic and Fiscal Impact of Economic Development Organization
- **Empire State Development** | Economic Impact of the Film Tax Credit on New York State (2014 and 2016)
- **Chamber of Schenectady** | Economic Impact of three military installations on Schenectady County
- **Greene County** | Economic Impact of second home owners

Tom Dworetzky, AICP, Camoin Associates

Project Experience - Economic & Fiscal Impact Analysis

- **Eastern Maine Development Corporation** | Economic impact of pulp and paper mill closures
- **Town of Hempstead IDA** | Economic and fiscal impact of mall redevelopment
- **Glens Fall Civic Center Coalition** | Economic and fiscal impact of the Glens Falls Civic Center
- **Maddalone and Associates** | Economic impact of a residential development project
- **Hempstead 209, LLC** | Economic and fiscal impact of a retail development project
- **Lyndhurst** | Economic impact of historic site tourism
- **Downtown Santa Monica, Inc.** | Economic impact of high-tech sector (in progress)
- **EFG / DRA Heritage LLC** | Impact of major mixed-use development project (in progress)
- **Empire State Development** | Economic and fiscal impact of the NY Film Tax Credit Program
- **Empire State Development** | Economic impact analysis of rail corridor
- **Nevele Investors, LLC** | Economic and fiscal impact analysis of casino in the Hudson Valley, NY
- **Saratoga Economic Development Corporation** | Economic impact of ED organization
- **Omega Institute** | Economic impact of wellness tourism
- **Town of West Seneca, NY** | Economic impact analysis of a major redevelopment project
- **Nassau County IDA** | Various economic and fiscal impact analyses
- **Nassau County IDA** | Cumulative economic impact of IDA programs
- **Glen Cove IDA** | Various economic and fiscal impact analyses

CostQuest Associates

Name: James Stegeman

Short Bio:

Mr. James Stegeman is the President of CostQuest Associates, Inc. As an Executive of the company, Mr. Stegeman has total responsibility for the company (P&L, staffing, strategic plan, etc.). In addition to this role, Mr. Stegeman leads the product development for the company.



TILSON

Mr. Stegeman formed CostQuest Associates, Inc. in 1999. Prior to CostQuest, Mr. Stegeman worked in a variety of positions at INDETEC International, the last of which was Executive Vice-President. He joined INDETEC in 1995. Prior to INDETEC, he spent 7 years in a variety of Financial and Regulatory management positions with Cincinnati Bell Telephone.

Education/Training:

BS (Mathematics and Statistics) Miami University, MS (Statistics) Miami University

Nationality: United States

Languages: English

CostQuest Models/Projects Contributed to:

Mr. Stegeman led the design, coding and implementation of the CostPro platform, the FCC's National Broadband Plan model (BAM) and the Connect America Fund model for High-Cost Funding (CACM). CostQuest models have been approved by federal authorities, multiple state commissions and are in use by multiple carriers with operations in over 40 states.

Costing/Economic/Regulatory Issues involved with:

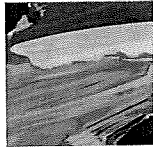
Mr. Stegeman has been a major force behind the development of the latest generation network cost models used by wireline and wireless companies and state and government agencies in support of broadband deployment analysis (telco, cable, wireless and satellite), network valuations, and UNE (Unbundled Network Element) and USF (Universal Service Fund) proceedings.

Sample of Clients:

CCNZ (NZ), FCC (US), U.S. States (many), U.S. Department of Commerce, AT&T, Verizon, Comcast, T-Mobile and many others

Current Focus Area:

Mr. Stegeman leads design of all cost, economic and network models for CostQuest. He also leads the organization as President and Owner/Partner.



TILSON

Name: Mark Guttman

Short Bio:

Mr. Guttman, an associate of and partner in CostQuest, heads up CostQuest's Geographic Information Systems efforts, Quality Assurance, Testing, and Documentation. He also provides assistance in Customer Support, System Design and Project Management.

Prior to his work with CostQuest, Mr. Guttman was an Analyst with INDETEC International. As such, he has worked in the telecommunications industry in a variety of roles related to cost modeling. His efforts have been focused on the development or review of a number of domestic and international cost models. These include the BellSouth Telecommunications loop model (BSTLM), GTE's Integrated Cost Model and the Base Cost Proxy Model (BCPM). He was also involved in the development and testing of the Australian National Universal Service Cost Model (NUSC). In addition to development efforts, Mark also worked on the review of the United States Federal Communication Commission's Hybrid Cost Proxy Model.

Education/Training:

Mark holds an Undergraduate Degree from the University Of Evansville, an M.B.A from the University of Cincinnati and a Masters in Geographic Information Systems from Penn State.

Nationality: United States

Languages: English

CostQuest Models/Projects Contributed to:

Mr. Guttman led the geospatial design of the FCC's National Broadband Plan model (BAM) and the Connect America Fund model for High-Cost Funding (CACM) among many others. He also leads to data development efforts related to broadband mapping in several states.

Costing/Economic/Regulatory Issues involved with:

Mr. Guttman has led all geospatial modeling for cost models used by wireline and wireless companies and state and government agencies in support of broadband deployment analysis (telco, cable, wireless and satellite) and UNE (Unbundled Network Element) and USF (Universal Service Fund) proceedings.

Sample of Clients:

FCC (US), U.S. States (many), U.S. Department of Commerce, AT&T, Verizon, Comcast, T-Mobile and many others

Current Focus Area:

Mr. Guttman leads CostQuest operations and oversees geospatial design of all cost, economic and network models for CostQuest.



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4. Project Approach

Phase 1—Analysis

Project Launch

Tilson will conduct a project kick-off meeting in Topeka with the stakeholder group and with JEDO staff responsible for overseeing the project. In these meetings we will review the scope and establish clear expectations for the management of the project, including the project schedule and deliverables. As part of this meeting, we will listen carefully to understand the objectives and questions of local stakeholders. We will ask questions of the participants to probe for key constraints, key local concerns, constituencies, and values that can shape the approach to any potential project. In tandem with this kick-off, we will familiarize the consulting team with the Topeka City & Shawnee County Local Community Technology Planning Pilot Project KDOC final report and supporting documentation, drawing both on information available through the City and County and CostQuest Associates, who is available as a resource to the team.

Economic Impact Study Validation

Tilson will bring to the engagement a seasoned economic development consulting firm, Camoin Associates, with whom Tilson has worked in other jurisdictions. Senior staff at Camoin experienced in the preparation of economic impact studies and the use of IMPLAN will conduct a peer review of the economic impact study prepared by Vision360 and note key points of concurrence or difference. Camoin will provide an opinion regarding if the findings within the KDOC final report are accurate and viable.

FTTP Business Case Review

Tilson proposes an approach that will build on, validate, and extend the prior work done by CostQuest Associates for the County. Tilson is familiar with the CostQuest Gigabit Cities Model (GBCM) and for this project will license its use from CostQuest. This will permit us full access to the model, allowing us to trace and validate the development of the cost estimate and business case/financial model from inputs to outputs. Tilson is the only vendor that has acquired this level of access from CostQuest to the model for Topeka and Shawnee.

The GBCM relies on network cost assumptions for areas like the areas being modeled. Tilson does engineering for fiber networks and can develop cost factors independently for the Topeka/Shawnee area. Our approach to validation will be two-fold:

1. We will validate the cost factors and review key assumptions used in the GBCM for reasonableness. Where necessary, based on our own research into we will ask CostQuest to adjust these factors.
2. We will thoroughly review the development of the financial model from the cost factors and key assumptions to validate the business case.

In addition, we will review the model's assumptions about demand and test the sensitivity of the business case outcomes to those assumptions. Based on this review, we will provide an opinion regarding the range of take rate assumptions under which the business case is positive and recommend strategies for validating that demand is likely within that range prior to committing to construct a full network.

Our approach will provide us the deep access to the GBMC that will provide us the ability to independently validate the work of CostQuest. Licensing the GBMC model for this engagement will also provide us with



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improved ability to ask CostQuest critical questions and engage in a back-and-forth dialog with them about the model outputs.

At the end of the day, our work will result in two positive outcomes for JEDO in addition to a basic model validation:

1. We will have collected cost factors specific to the Topeka/ Shawnee area, which can be used in the development a budget associated with a network design, should the County or City choose to proceed to that stage.
2. We will have an updated and validated model specific to the Topeka/Shawnee area that can be used to examine additional business model scenarios and can be used later to receive inputs from actual engineered designs, should the County decide to proceed to that stage.

FTTP Business Model Scenarios in Topeka and Rural Shawnee County

Using the updated and validated GBCM we will prepare customized ownership/operating business model scenarios for Topeka and areas of Shawnee County outside of Topeka:

- A retail service provider that is the owner and operator of the network
- A public-private partnership between a public network owner and a private ISP/network operator
- An open-access model with a public network providing wholesale lit transport services open to multiple retail ISPs
- A dark fiber model with a public owner of fiber optic leasing strands to one or more ISPs who light the network and provide service to retail users

We will provide JEDO the ability to assess the contribution to the business case for each scenario within neighborhoods in the City or other sub-county areas outside the City. We will run the full set of financial projections found in the GBCM.

Rural Wireless

In addition, Tilson will prepare a high-level wireless design for a rural fixed wireless broadband network in rural unserved parts of the County. Tilson will identify a potential network design based on an analysis of likely existing tower locations and an estimate of the number of new tower or pole locations required. (Note, this level of design does not include a site-by-site assessment of the structural suitability or commercial availability of individual structures. Instead, we will use reasonable planning assumptions intended to produce site counts for new and existing structures reasonably similar to what a fully engineered design would likely produce.) We will assume the use of unlicensed spectrum or licensed frequency bands that a new market entrant would likely be able to readily acquire. We will also assume that the rural wireless network is an extension of a fiber network in Topeka, and that fiber will be extended to tower sites as needed, or microwave backhaul will be used where feasible and economic. The design will produce a propagation map predicting coverage. We will produce a cost estimate for the network, based on the high-level design.

Using the Tilson high-level cost estimate for the County, we will develop cost inputs for a version of the GBMC tailored to wireless broadband networks. With the customized model, we will we will prepare a business case analysis of the proposed rural wireless network, including the set of full financial projections found in the GBCM.



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Report and Recommendations

Based on the work of the consulting team to validate the economic impact study and validate and extend the business case analysis, Tilson will prepare a draft report for review by the stakeholder group. In this draft report, we will explain our validation approach, the results of the cost estimation and business model scenarios, and an opinion regarding the demand assumptions used in the model, and recommendations for methods that can be used to confirm demand. We will also address key decisions that the JEDO Board in consultation with the stakeholder group should address in framing the RFI.

We propose to provide a draft of the report to the stakeholder group, with a request for questions that the group may have about the report. We would follow this with a presentation to the group on the report in Topeka to explain key elements of the draft report, and discuss the analysis and conclusions with the group. Depending on the length of time that the group is prepared to devote to this meeting and the direction of the Broadband Task Force leadership, we are also prepared at this meeting to facilitate a discussion among the stakeholders to explore the impact and relationship of the analysis to group's objectives, concerns, and values for the project, discussed at the kick-off meeting. If desired by the Broadband Task Force leadership, we are also prepared to act as an outside facilitator to structure the group's decision-making process to arrive together at set of recommendations to the JEDO Board that are acceptable and have the consensus of the group to move to Phase 2.

We propose that we then allow stakeholders an additional defined period to provide written feedback on the draft report (perhaps 1-2 weeks, to keep forward momentum). Tilson would then revise the draft report, which would again be provided in advance of a meeting with the stakeholder group in Topeka. At this meeting, Tilson will present to the stakeholders a draft presentation intended for the JEDO Board, and take feedback from the group. Our approach will include key recommendations about why the JEDO Board would or would not adopt different RFI options, and seek feedback on these recommendations.

Phase 2--Presentation

In this phase, we will present our report and conclusions to the JEDO Board, including an overview on the stakeholder feedback provided during Tilson's meetings with the group. We will assist the JEDO Board in making key decisions regarding whether to have an RFI, if so how to structure it and what services to target.

We propose to structure the conversation over two JEDO Board meetings which Tilson would attend. The consultant's report would be provided in advance of the first JEDO Board meeting. In the first meeting, we would focus on understanding the key findings and conclusions of the report, including understanding the different business models analyzed and answering questions, how those models engage the private sector differently, and their implications for the public-sector entity responsible for implementing them. We will summarize the feedback and recommendations from the stakeholder meetings in Phase 1.

In the second meeting, we will assist the Board to have a structured conversation regarding key choices in issuing (or not issuing) an RFI for one or more of the options, including partners for an FTTP network in Topeka, and partners for an FTTP and/or wireless network in rural townships in Shawnee County. To facilitate decision-making, we will provide a primary "straw man" option (based on our analysis and feedback from stakeholders) and the most likely alternatives. We will include a proposed timeline and schedule for executing each major alternative. We will assist the Board in weighing the options and prioritizing among them. Should the Board decide not to release an RFI, we can provide recommendations regarding alternative categories of actions which the Board may wish to investigate.



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Phase 3--RFI Execution

The RFI stage of this project represents a critical phase for advancing and refining the City and County's approach to developing a project. Prior to an RFI, a public-sector entity planning a broadband initiative must make assumptions regarding the interest or potential response of private sector partners or independent actors. An RFI can better bring into focus a community's actual options, surface previously unknown partners, and provide public officials important answers to constituents' questions about which alternatives were considered and why.

A key piece of Tilson's value to our community clients is our ability to help them ask well-informed questions of potential providers, and objectively evaluate the results. We do this with a deep understanding of the drivers and constraints of both public and private sector entities in the broadband space. We can provide the independent expertise required for sound decision-making.

To be effective, an RFI should have a clear framework based on critical thinking about what the public entity wants to achieve, what it is able and willing to bring to a partnership (and what it is not), what it wants to do, what it would do if necessary, and what it is unwilling to do. The devil is in the details, and we know how to ask critical questions that will clarify the ask in the RFI.

Based on the present RFP for consulting services, it appears that JEDO may have interest in issuing an RFI that could serve either as a basis for selecting a private partner directly, or informing a later, more specific RFP. We have experience creating such an either/or type of request document. These types of requests, structured properly, can provide motivation for more serious responses, knowing that the opportunity for action may be only now and not later. We will help JEDO understand and discern the type of partnerships about which it may be able to make a decision in only one round vs those types of partnerships about which it may wish to seek out additional information before making a decision.

Tilson is experienced on both sides of public procurement processes (responding to them and crafting them), in addition to our understanding of the subject matter at hand. We can work collaboratively with JEDO representatives (including legal counsel) to draft RFI language customized to local requirements. We will provide a presentation in Topeka to JEDO decision-makers on the proposed language, and support JEDO as it issues the RFI, including providing recommendations on local and national companies to whom JEDO should consider sending notice of the RFI.

Questions on an RFI can be an important way to encourage the most meaningful, actionable responses. Once issued, we will support JEDO in responding to questions on the RFI in a timely and accurate manner, taking care to work only through the procedural channels established for the RFI. Once RFI responses are received we will provide a structured evaluation of the responses, including:

- respondents' qualifications,
- the ability of each respondent to deliver proposed solutions and strategies,
- feasibility of proposed sustainable public-private partnerships
- feasibility of proposed costs
- feasibility regarding proposed initial and on-going funding
- general acceptability

We will prepare our analysis in the form of a decision matrix and report detailing our opinion based on our ongoing engagement to develop and understand JEDO's goals, priorities, and constraints. We will meet with the JEDO Board, designees, and legal counsel to discuss our recommendations and support JEDO's decision-making process. We propose to structure the conversation over up two JEDO Board



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meetings which Tilson would attend. Should JEDO be prepared to decide more quickly, we can collapse the agendas into a single meeting. In the first meeting, we would focus on understanding the responses relative to each other, the questions answered by the responses to the RFI, and new questions raised. A key objective of the first meeting will be fleshing out key questions that JEDO decision-makers need to deliberate on to decide.

In the second meeting, we will assist the Board in a structured deliberation of its options, including selecting a respondent as a negotiation target, issuing an RFP, or investigating alternative categories of actions which the Board may wish to investigate.

Phase-4 – RFP Execution

Should JEDO decide to proceed to an RFP, a key task will be helping it focus its efforts and that of potential respondents to a more specific set of options and information requests. While at an RFI stage, we could help JEDO leave the door open for a broader range of appropriate options it may want the opportunity to consider, at this stage we would assist JEDO in crafting a request for proposals that will elicit responses on the specific options that JEDO wishes to consider, and the information to which it needs to say “yes” or “no”. We would bring to this task a thoroughness and ability to listen carefully to what we have heard from JEDO, its stakeholders, as well as respondents to the RFI.

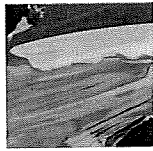
Functionally, the stages of work on the RFP are very similar to those of the RFI, especially if the RFI is itself intended to be directly actionable, as would the RFP. This includes working collaboratively with JEDO representatives (including legal counsel) to draft RFP language and a presentation in Topeka to JEDO decision-makers on the proposed language. It includes supporting JEDO through the issuance and evaluation process, including responding to questions and preparing a decision matrix and report detailing our evaluations and opinion. As in the RFI process, we will meet with the JEDO Board, designees, and legal counsel to discuss our recommendations and support JEDO’s decision-making process, once again providing decision support through up to two JEDO meetings which Tilson would attend.

Phase-5 – RFP/Taxing Entity Project Handoff

Transitioning from RFP to a contract and implementation project is one of the most critical stages for a community broadband project. Communities benefit from independent expertise on their side, even in negotiating with an amenable partner. Details and nuances matter, and can have important consequences. At the same time, implementation will literally create facts on the ground, and it is important to think through the length and types of commitments being made, and the community’s options if it must deal with poor performance, technological change, or unexpected financial contingencies. Tilson will protect your interests while helping you understand and respond to legitimate interests of a potential partner. It is important to set up a working partnership that has structural incentives for parties to do the right thing and does not rely only on policing of a brittle arrangement. In many cases, this work starts at the RFI/RFP stage, but it continues with great importance at this stage.

Tilson will be available as JEDO’s in-house broadband expertise to interface with awardees and to negotiate a final scope of services, project plans, project timelines and final pricing.

While we expect to work with the client’s own legal counsel to craft contract language, we will be prepared to develop a proposed term sheet of essential contract provisions to guide the legal work. We have worked with agreements between communities and private providers as well as between commercial entities, and we can act as a sounding board regarding commercial norms in these types of



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agreements, to facilitate crafting of agreement that allow parties to get to “yes” in a reasonable manner and timeframe.

In our experience, contract negotiation can be one of the more unpredictable stages of a community broadband project in terms of hours spent. The length of time required is substantially outside the control of the consultant, and to a significant extent the community as well, to the extent that completion of work requires agreement by all parties. To a degree the level of uncertainty in negotiation can be mitigated by clarity in the RFP process, which Tilson would provide. Recognizing that there is nevertheless uncertainty in the negotiation process, our fixed-price proposal includes a “pool” of 44 consulting hours that can be used for this activity. Should the progress of negotiations be such that more than the pool of hours would be required, we would expect to jointly assess with JEDO the trajectory of the negotiations, the likely number of additional consulting hours to reach a successful conclusion, and the level of benefits JEDO could reasonably hope to achieve from continued negotiation support; based on the joint assessment, JEDO could decide whether it wanted to extend the engagement through a contract modification.

Tilson also understands the importance of good project hand-offs. We are prepared to facilitate a kick-off meeting in Topeka between the successful RFP respondent and the assigned principal project manager of each taxing entity managing projects. (This task is more predictable, and therefore would not come out of the 44-hour pool.)

Phases 3-5--Grant Research and Application

JEDO has requested consulting assistance in evaluating and/or applying for grant opportunities in each of Phases 3 through 5. Tilson is familiar with a range of federal and state funding opportunities, and can provide consulting advice on the applicability of funding sources. Practically speaking, we expect that the nature of grant funding opportunities available for a project will depend greatly on its specifics, most of which will be determined through the assessment of business model options, consultation with stakeholders, deliberation by JEDO, and responses to the RFI or RFPs. In our experience, it is prudent for our clients to investigate opportunities to offset project costs with grant funds but not to build a case for a project around a grant opportunity unless the scope of the project is narrow and tailored to a particular grant category, or unless the project would only be undertaken if grant funding is available. We can help you determine if either of these conditions are true for Topeka or Shawnee County.

In the RFI, RFP, and contract negotiation process, we can advise JEDO generally on strategies for structuring a project so as not to unnecessarily foreclose grant opportunities. This is especially important when it comes to some of the most significant federal funding opportunities available through the Federal Communications Commission’s Universal Service programs. Because the extent of the grant funding opportunities will become clearer only once the consulting project is underway, we propose to establish in our fixed price proposal a pool of 44 consulting hours to get started on research and investigation of grant opportunities that are likely the most promising for the types of projects being considered. We are happy to provide additional assistance beyond this level if JEDO decides to extend the engagement for that purpose. We believe that, since pursuing grant funding requires resources but has some uncertainty of return, we should as a primary objective of the base research on grant opportunities help JEDO assess the cost of additional work to pursue these opportunities vs. the size of the funding opportunity and the likelihood of success. We can do this by evaluating factors such as the total size of funding available, who is eligible to apply or receive funding, the competitiveness of prior rounds, and the degree of match for the area against eligibility or evaluation criteria. This will provide JEDO with the ability to make more informed judgements about how aggressive it wants to be in pursuing grant funding.



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Optional Service—Fiber Network High Level Design

The Gigabit Cities Model will create a representation of a fiber network in Topeka and Shawnee County, and Tilson will validate cost factor and the method that the GBCM uses to develop the business case scenarios. However, should the City and County decide to proceed to the development of a fiber network—the representation of a network in the GBCM cannot be directly constructed. While it would be overkill for JEDO at this point to commission a full-fledged detailed fiber design, a middle ground is available that Tilson can offer as an additional option. Tilson’s engineers can create an independently-developed high-level fiber network design for the City and County. This design would be GIS-based, and would be transferrable to the platforms that Tilson uses when performing a detailed, biddable, constructible fiber design. The advantages of this are several:

- Should the City and the County decide to proceed to a detailed fiber design, that exercise will be able to directly use the work produced by the high-level design, and will therefore be further along in the process.
- The independently-developed high-level design will provide additional validation to the GBCM, as it will allow us to check the model’s calculation of factors such as miles of fiber, cable sizing, and other factors that are generated when an engineer lays out a network. Should the exercise produce different results than the model, we can investigate why and if necessary make additional adjustments
- A high-level network design can provide the opportunity to lay out more specific options for how to divide responsibilities with a partner in an RFI or RFP process.

In order to create a greater range of budget options for JEDO, we have not included this service in the base scope and price, but are providing a price for this option in the pricing proposal, if done at the time of the business case validation.

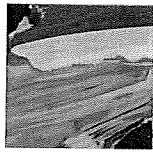


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5. Project Plan & Timeline

The following table presents a proposed timeline for the project.

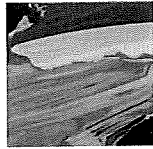
	2017								2018								
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Phase 1--																	
Analysis																	
Project Launch / Kick Off																	
Economic impact study validation																	
Business case validation																	
Prepare draft report and presentation																	
Stakeholder meetings on recommendations																	
Prepare revised report and presentation																	
Stakeholder meetings on revised recommendations																	
Phase 2--Presentation																	
Revised report and presentation																	
Presentation to JEDO Board																	
RFI decision support																	
Phase 3--RFI Execution																	
Draft RFI																	
Present draft RFI																	
Revise and issue RFI																	
Coordinate RFI process																	
Create RFI decision matrix																	
Prepare report and presentation to JEDO																	
JEDO Board meetings																	
Phase-4 – RFP Execution																	
Draft RFPs																	
Present draft RFPs																	
Revise and issue RFPs																	
Coordinate RFP process																	
Evaluate responses and create decision matrix																	
Prepare report and presentation to JEDO																	
JEDO Board meetings																	
Phase-5 – RFP/Taxing Entity Project Handoff																	
Vendor negotiation																	
Implementation kick-off																	



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Assuming a mid-to-late May project kick-off, Tilson can complete Phase 1 of the project by the end of the summer of 2017. Should JEDO choose the option for a fiber high-level design instead of a cost factor validation of the GBCM, we can accomplish this substation with little to no elongation of the schedule (0-2 weeks, depending on the scheduling of engineering resources).

The remainder of the schedule is driven primarily by JEDO Board meeting schedules and the need to provide RFI and RFP respondents enough time to deliver thoughtful, high-quality responses. We have assumed that the JEDO Board will not meet more frequently than once a month. We are, however, happy to work with JEDO to accelerate the schedule if fewer meetings or meetings in closer succession are possible.



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6. Conclusion

JEDO is ready to take the prior work performed in Topeka on improving broadband service and create options for moving to the next steps. Tilson and its team brings familiarity with the tools used to produce the prior study and is bringing to the project deep access to the Gigabit Cities Model. We will bring our experience acting as an independent, market-savvy advisor to states and communities on broadband to this engagement, as well as our experience working on a range of fiber and wireless broadband networks, as a reviewer, designer, or implementation manager. By issuing this RFP, JEDO has taken an important step to give its broadband aspirations momentum. We at Tilson look forward to joining you on that journey.

EXHIBIT C

Response to Request for Proposals for Broadband Consulting Services

Topeka and Shawnee County Joint Economic Development Organization
Pricing Proposal



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Tilson Technology Management

5347 S. Valentia Way

Greenwood Village, CO 80111

Phone: 207-591-6427

Fax: 207-772-3427

Primary Contact: Christopher Campbell

Federal ID No.: 01-0509537

Offer is firm and not revocable for a period of ninety (90) days.

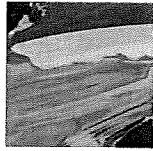


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This document accompanies Tilson's Technical Proposal to the Joint Economic Development Organization's (JEDO) Request for Proposals for Broadband Consulting Services. For this scope of work, we are proposing a milestone-based fixed fee for the tasks described in the RFP. In a limited number of instances where the amount of time required for a task cannot be well-defined in advance, we are proposing a defined "pool" of consulting hours available to the task. We would invoice JEDO monthly for milestones achieved within the month over the life of the project. For the milestone-based fees outlined below Tilson's expenses, including travel and the subcontracted services of Camoin Associates and CostQuest Associates are included in the price.

We are not proposing to bill at an hourly rate for services within the defined scope. However, Tilson is available to provide additional services if requested and agreed to. For that reason, we are also providing hourly rates (which are exclusive of expenses) for consulting and engineering services.

	Milestones	Milestone Fee
Phase 1	Kick-off meeting / project management initiation	\$ 5,990
	Economic impact study validation	\$ 12,750
	Fiber network business case validation and new business model scenarios	\$ 40,775
	Rural wireless high level design and business case scenario	\$ 28,000
	Draft and revised report, stakeholder meetings	\$ 21,500
	<i>Subtotal</i>	<i>\$ 109,015</i>
Phase 2	First JEDO Board meeting	\$ 5,300
	Second JEDO Board meeting	\$ 5,300
	<i>Subtotal</i>	<i>\$ 10,600</i>
Phase 3	Draft RFI presentation to JEDO	\$ 10,650
	Final RFI delivery and coordination	\$ 3,300
	RFI review and recommendations report	\$ 8,100
	First JEDO Board decision response meeting	\$ 5,300
	Second JEDO Board decision response meeting	\$ 5,300
	<i>Subtotal</i>	<i>\$ 32,650</i>
Phase 4	Draft RFP presentation to JEDO	\$ 10,650
	Final RFP delivery and coordination	\$ 3,300
	RFP review and recommendations report	\$ 8,100
	First JEDO Board decision response meeting	\$ 5,300
	Second JEDO Board decision response meeting	\$ 5,300
	<i>Subtotal</i>	<i>\$ 32,650</i>
Phase 5	Vendor liaison/ negotiation support (44 Hour pool)	\$ 6,900
	Implementation Kick-off meetings	\$ 6,500
	<i>Subtotal</i>	<i>\$ 13,400</i>
Other	Grant Research / Application Support (44 hour pool)	\$ 6,900
Total Phases 1-5		\$ 205,215
Optional	High-level fiber design and cost estimate	\$ 28,000



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Additional scope hourly rates:

- Consulting Director: \$225/hr.
- Senior Consultant: \$150/hr.
- Engineer: \$150/hr.
- Project Manager: \$150/hr.
- Field Technician: \$95/hr.