This Contract, made and entered into on May 1, 2014, documents the agreement between The University of Tennessee (hereinafter “UNIVERSITY”), and The City of Cleveland, TN (hereinafter “CONTRACTOR”).

This Contract consists of this cover page, University’s Receivable Terms and Conditions, and the Agreement attached additional pages. Terms contained on this cover page and in University’s Receivable Terms and Conditions shall prevail over those of any attachment unless otherwise stated under “Other terms” below.

The University will provide the following: See attached Agreement between the City of Cleveland and the University.

The period of performance under this Contract is from May 1, 2014 through December 10, 2015. However, either party may terminate this Contract by giving at least thirty (30) days written notice before the effective termination date, in which the University shall be entitled to receive equitable compensation for satisfactory authorized work completed as of the termination date.

The CONTRACTOR will reimburse the UNIVERSITY $25,000 program operations fee and $1,000-$9000 per participating course up to a maximum of $92,000.

Other terms (Put N/A if none): See attached Agreement between the City of Cleveland and the University.

In witness of their acceptance of the terms of this agreement, the parties have had this Contract executed by their duly authorized representatives.

FOR CONTRACTOR:

<table>
<thead>
<tr>
<th>Signature</th>
<th>Printed Name</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Title</td>
<td>Federal ID</td>
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Address

FOR UNIVERSITY:

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<th>Departmental Signature (optional)</th>
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<tbody>
<tr>
<td>University Authorized Official Signature</td>
<td>Printed Name / Title</td>
<td>Date</td>
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</table>
THE UNIVERSITY OF TENNESSEE
RECEIVABLE TERMS AND CONDITIONS

1. The University is not bound by this Contract until it is approved by the appropriate University official(s) indicated on the signature page of this Contract.

2. This Contract may be modified only by a written amendment which has been executed and approved by the appropriate parties as indicated on the signature page of this Contract.

3. Either Party may terminate this Contract by giving the Other Party at least thirty (30) days written notice before the effective termination date. The University shall be entitled to receive equitable compensation for satisfactory authorized work completed as of the termination date.

4. If the University fails to perform properly its obligations under this Contract or violates any term of this Contract, the Contractor shall have the right to terminate this Contract immediately and withhold payments in excess of fair compensation for completed services. The University shall not be relieved of liability to the Contractor for damages sustained by breach of this Contract by the University.

5. The University shall not assign this Contract or enter into a subcontract for any of the services performed under this Contract without obtaining the prior written approval of the Contractor.

6. Unless otherwise indicated on the reverse, if this Contract provides for reimbursement for travel, meals, or lodging such reimbursement must be made in accordance with University travel policies.

7. The University shall maintain documentation for all charges against the Contractor under this Contract. The books, records and documents of the University, insofar as they relate to work performed or money received under this Contract, shall be maintained for a period of three (3) full years from the date of the final payment, and shall be subject to audit at any reasonable time and upon reasonable notice, by the Contractor or the Comptroller of the Treasury, or their duly appointed representatives. These records shall be maintained in accordance with generally accepted accounting principles.

8. No person on the grounds of disability, age, race, color, religion, sex, national origin, veteran status or any other classification protected by Federal and/or Tennessee State constitutional and/or statutory law shall be excluded from participation in, or be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract. The Contractor shall, upon request, show proof of such non-discrimination, and shall post in conspicuous places, available to all employees and applicants, notice of non-discrimination.

9. The Contractor, being an independent contractor, agrees to carry adequate public liability and other appropriate forms of insurance, and to pay all taxes incident to this Contract.

10. The University shall have no liability except as specifically provided in this Contract.

11. Both Parties shall comply with all applicable Federal and State laws and regulations in the performance of this Contract.

12. This Contract shall be governed by the laws of the State of Tennessee, which provide that the University has liability coverage solely under the terms and limits of the Tennessee Claims Commission Act.
AGREEMENT BETWEEN THE CITY OF CLEVELAND
AND THE STATE OF TENNESSEE
ACTING BY AND THROUGH THE STATE BOARD OF HIGHER EDUCATION
ON BEHALF OF THE UNIVERSITY OF TENNESSEE

AGREEMENT entered into between the City of Cleveland, a Tennessee municipal corporation (Cleveland), and the State of Tennessee acting by and through the State Board of Higher Education on behalf of the University of Tennessee (UT).

RECITALS:

(a) Cleveland provides a variety of services, programs and infrastructure to meet the needs of Cleveland area residents, businesses and visitors. To better serve the community, Cleveland proactively pursues partnership and grant opportunities to address known focus areas, including but not limited to redevelopment, economic development, transportation and parks planning, and general planning needs, subject to available staff time and funding.

(b) On annual basis, UT selects one community in Tennessee with which to develop a year-long engagement through the Smart Communities Initiative (SCI) program of the Office of the Provost. Through collaboration with the selected community, SCI seeks to promote research, education, service, and public outreach related to the development of livable communities.

(c) The SCI program engages faculty and students through the involvement of academic courses across multiple disciplines, including civil engineering, architecture, geography, political science, interior design, graphic design, advertising and public relations, and economics. Focused on community betterment and enhanced student learning, the program is designed to address real-world issues facing local government and the communities they serve. The SCI is funded through a partner fee from the selected community.

(d) For its 2014-15 academic year, UT has selected Cleveland for the SCI program.

(e) In addition to Cleveland funding, Cleveland may in turn secure funding from additional public partners as well as private for profit and non-profit entities, to meet the obligations set forth under Section 4.

(f) Cleveland expects to dedicate staff time and resources for the Projects from fund sources appropriated in the 2014-15 budget, as well as the public, private for-profit and non-profit entities to support each project.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

Section 1: Term. This Agreement shall become effective upon the date of the last signature of all parties herein, and shall continue until Cleveland has made full payment of all costs incurred in
completion of the Projects or until terminated as provided in Section 6 of this Agreement. Expenditures on the project may be incurred as of May 1, 2014.

**Section 2: Project Duties.**

2.1: Duties of Cleveland. Cleveland will develop up to 25 Projects and collaborate with UT to specify a Scope of Work for each Project, as described in Section 2.3, to UT. Multiple related academic courses may be engaged in a single Project as deemed appropriate by Cleveland and UT. Cleveland will provide technical assistance and relevant information in support of the Projects, including but not limited to existing data sets and previously prepared reports, findings, architectural plans and maps, and stakeholder or public engagement activity summaries. Cleveland will also host student field trips in an effort to establish context for each Project. Cleveland will participate in a kick-off event, mid-course reviews of student progress, and year-end activities. Cleveland will support preparation and implementation of the SCI communications plan and organize stakeholders or public engagement activities as necessary in support of each Project. Cleveland may involve public partners as well as private for profit and non-profit entities in the SCI Program as deemed appropriate by Cleveland and UT.

2.2: Duties of UT. UT shall, consistent with the Scope of Work for each Project, as described in Section 2.3, prepare and provide final reports and student-generated materials in electronic and paper format. The final reports will present a summary of coursework, key findings, examples of student work, and recommendations for each Project. The final report for each Project shall include public policy ideas and concepts related to transportation and parks planning, civic engagement, economic development, redevelopment and urban renewal as applicable to each Project. UT will provide and supervise students familiar with the Projects to assist in the development of the final reports. Where deemed appropriate by UT, UT may propose the submission of an alternative deliverable such as a software tool or a bound booklet, however acceptance of such a deliverable is subject to approval by Cleveland and must be documented with justification in the Project Scope of Work. UT will assign two Faculty Fellows to assist with coordination, research, marketing, or other duties related to the function of the SCI year. Each Fellow will receive either a course release or the budgetary equivalent in professional development funds for their service. UT will coordinate at least one event to kick off and one event to conclude the 2014-15 academic year to involve UT administrators, faculty, and students and Cleveland leadership officials, staff, and stakeholders. UT will, in collaboration with Cleveland, prepare a communications plan and publicity materials outlining the SCI program and the Projects.

2.3: Scopes of Work. The Scopes of Work, as attached and referenced herein in template form as Appendix, created by Cleveland and UT for each Project shall: include an overview of each Project; describe the purpose of the Project; identify Project objectives and deliverables; list the academic courses engaged in the Project; establish a timeline and major milestones; contain a proposed Project cost per academic course; and include Cleveland and UT Project-specific contact information. Each Scope of Work may be amended, in writing executed by each party’s authorized representative. The authorized representative for Cleveland is Janice Casteel, who serves as the City Manager for Cleveland, or other such individual as she may designate in writing. The authorized representative for the UT is Dr. Janet E. Nelson, who serves as the
Associate Vice Chancellor for Research, or other such individual as she may designate in writing. After execution of this Agreement, the parties may agree to add, modify, or eliminate Projects pursuant to the terms of this Agreement.

Section 3: UT Obligations.

3.1: UT shall provide recommendations related to the development of livable communities as specifically related to each Scope of Work for each Project approved by Cleveland and UT. The obligations defined and described in each individual Scope of Work shall hereinafter be referred to as “Work.” The cost of each academic course assigned to a Project shall not exceed $9,000. Should a Project engage more than one academic course as defined in Section 2.1, the not to exceed amount will be proportionate to the number of academic courses engaged multiplied by $9,000. Cleveland and UT may agree to a change in a Scope of Work, provided that any such change shall require that Cleveland and UT have first negotiated any appropriate change to the not to exceed amount based on the changed Scope of Work.

3.2: Cleveland shall not be responsible to provide UT any labor, materials, supplies, equipment, office space, shop space, reference and background data and information, and all other things necessary for the performance of the Work described in each Scope of Work, except as otherwise expressly provided therein.

Section 4: Cleveland's Obligations.

4.1: Cleveland shall reimburse UT between $1000 and $9000 per course for costs incurred during the performance of its obligation for each Project as set forth in each Scope of Work. In no event shall Cleveland be obligated to reimburse more for a particular Project than the maximum sum identified in the Scope of Work, nor shall the exhaustion of the maximum amount to be compensated under this Agreement relieve UT for its obligations as set forth herein. Total reimbursement paid by Cleveland to the UT pursuant to this Agreement shall not exceed $92,000.00. A program operations fee of $25,000 will be paid to UT during the first billing cycle to cover program-related expenses including events, printing, Faculty Fellow stipends, and miscellaneous costs. Project funds will be used by UT to cover course support, project-related travel, and final reports. Unobligated funds may be redirected to support existing Projects or to fund additional Projects.

4.2: Cleveland expects to receive itemized invoices from UT no more frequently than every 90 days. The City shall ensure that payment of the invoiced amount is made to UT no later than 30 days after receipt of the invoice. Invoices shall be addressed to the City of Cleveland, Accounts Payable, P.O. Box 1519, Cleveland, TN 37364-1519.

Section 5: Ownership of Work Product. Each party shall retain ownership of its own work product. Each party hereby grants to the other party a non-exclusive, royalty free, worldwide perpetual license to use, copy, and distribute any work product of and information provided that party pursuant to this Agreement for non-commercial, educational, and research purposes only. Subject to the terms of this Section, Cleveland may share the work product (student reports,
designs, presentations, and recommendations) with public partners, as well as private for profit and non-profit entities in the SCI Program.

**Section 6: Termination.**

**A. Mutual.** This Agreement may be terminated by written mutual consent of all the parties.

**B. By City.** This Agreement may be terminated by City and shall become effective 30 days after receipt of written notice by the authorized representative for UT. In the event the City chooses to exercise its right to terminate the Agreement under this section 6B, its obligation for reimbursement to UT shall be without prejudice to any obligations or liabilities accrued up to such termination date. The total reimbursement to UT shall not exceed the values authorized under Sections 3.1 and 4 of this Agreement.”

**Section 7: Amendments.** Except as otherwise provided for a Scope of Work in Section 2.3, this Agreement may not be amended except upon the written agreement of all the parties.

**Section 8: Waiver.** No provision of this Agreement may be waived except in writing by the party waiving compliance. Any waiver, if made, shall be effective only in the specific instance and for the specific purpose given. No waiver of any provision of this Agreement shall constitute waiver of any other provision in this Agreement, whether similar or not, or shall constitute a continuing waiver of the provision waived. Failure to enforce any provision of this Agreement shall not be deemed a waiver of the provision or of any other provision.

**Section 9: Choice of Law, Venue.**

**9.1:** This Agreement shall be governed by the laws of the State of Tennessee, without regard to conflict of laws principles.

**9.2:** If any provision of this Agreement is found by a court of competent jurisdiction to be unenforceable, such provision shall not affect any other provisions. In the event of such finding, the parties shall immediately meet and negotiate new provision, to reflect the intent and purpose of the provision, preserving to the fullest extent permitted the intent of the parties as set forth in this Agreement upon its effective date.

**Section 10: Relationship.**

**10.1:** Cleveland and UT are not, by virtue of this Agreement, agents for the other party; nor are they partners nor joint venturers in connection with activities carried on under this Agreement, and neither party shall have an obligation with respect to each other’s debts or other liabilities.

**10.2:** The individuals participating on behalf of each party, including their officers, employees, and agents of each party are not the officers, employees, or agents of the other party, and are not eligible for any benefits through the other party, including without limitation, wages, federal social security, health benefits, workers' compensation, or retirement benefits.
Section 11: Notice.

11.1: Any notice required or authorized to be given to Cleveland shall be given by first class mail to Janice Casteel, City Manager, City of Cleveland, P.O. Box 1519, Cleveland, TN 37364-1519, or to such other address as she may hereafter specify in writing.

11.2: Any notice required to be given to UT shall be sent to both the Office of Sponsored Programs, Attention: Theresa Sears, 1513 White Avenue, The University of Tennessee, Knoxville, TN 37996-1529, and the Office of the Provost, Attention: Kelly Ellenburg, 525 Andy Holt Tower, Knoxville, TN 37996-0152.

Section 12: Compliance with Applicable Law. The parties shall comply with all federal, state, and local laws and ordinances applicable to this Agreement. The parties agree that no person shall, on the grounds of disability, age, race, color, religion, sex, national origin, veteran status or any other classification protected by Federal and/or Tennessee State constitutional and/or statutory law, be excluded from participation in, or be denied the benefits of, or otherwise be subjected to discrimination in the performance of this Agreement. The parties agree to comply with all applicable requirements of federal, state, and local civil rights and rehabilitation statutes, rules, and regulations.

Section 13: Entire Agreement. This Agreement sets forth the entire understanding between the parties with respect to the subject matter of this Agreement, and supersedes any and all prior understandings and agreements, whether written or oral, between the parties with respect to such subject matter.

Section 14: Access to Records. Each party to this Agreement shall have access to the other party’s documents, investigative reports, papers, and other records which are directly pertinent to this Agreement for the purposes of making financial, maintenance, or regulatory audit. Such records shall be maintained for at least three years or longer where required by law. Nothing herein shall be construed to grant Cleveland access to records subject to the Family Educational Rights and Protection Act of 1974.

Section 15: Execution in Counterparts. This Agreement may be executed in counterparts, each of which shall be an original, and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the execution of which having been first duly authorized according to law.

Tom Rowland, Mayor, City of Cleveland

Date
Project Overview

The City maintains a National Pollutant Discharge Elimination System (NPDES) permit in five-year cycles. Periodic data collection is necessary within these permit cycles and much cover the 303(d) list impaired streams within the approximately 27 square miles inside the city limits. The City’s major drainage basin, South Mouse Creek, flows along the western perimeter of the downtown core which is also impacted by the two main tributaries, Woolen Mill Branch which flows through the heart of town and Fillauer Branch which flows generally near the western boundary of downtown. The City maintains its permit which covers the stormwater drainage system in cooperation with the Tennessee Department of Environment and Conservation (TDEC) which is in turn accountable to the Environmental Protection Agency (EPA). Documentation of conditions along stream banks, conditions of outfalls, water quality testing, monitoring of prescribed flora and fauna, are among the things that must be done periodically. Within the SCI project the work would involve the collection, mapping, and reporting of descriptive data on the stormwater collection, treatment, and conveyance system, e.g. the size, location, and condition of catch basins, pipes, box culverts, etc. The project will involve the use of Microstation Geographics software and Microsoft Access to compile and map data using a Windows tablet and GPS and appropriate safety equipment.
Purpose of Project

The purpose of this project is to map and report on Cleveland’s Stormwater collection, treatment, and conveyance system in support of its NPDES permit.

Desired Outcomes/Project Objectives

City of Cleveland

- Locate and describe the components of Cleveland’s Stormwater collection, treatment, and conveyance systems.
- Acquire current data about the stormwater system that can be deployed in the evaluation of system needs in the face of current and future development.

University of Tennessee

- Provide UT interns with an educational experience that will contribute to their professional development.
- Allow UT interns to learn professional and social skills that will help them gain employment in their chosen careers.

Final Deliverables/Work Products to City of Cleveland

- Up-to-date maps of Stormwater infrastructure, primarily those portions within public rights-of-way such as ditches, pipes, catch basins, etc.
- Up-to-date database concerning the elements of Cleveland’s Stormwater infrastructure that are mapped including location, type, size, and condition.

City of Cleveland Responsibilities

- Provide students with training and access to contextual information needed to implement the project in line with the expected deliverables and work products outlined above.
- Answer questions and provide timely feedback to UT students and faculty relative to the execution of this project.
- Communicate regularly with UT SCI project lead on student progress.

University of Tennessee Responsibilities

- Student completion of training by the City of Cleveland early into the semester in advance of the project implementation.
- Student submission of draft and final work products in accordance with the schedule provided below.
- Student solicitation of regular feedback from City of Cleveland project lead and alternate contacts, as well as UT SCI project lead in order to produce a successful work product in line with the expected deliverables and work products outlined above.
- Faculty facilitation and oversight of student work, timely feedback and answers to student questions, and regular communication with Cleveland project lead on student progress.

Courses Represented

- Independent Study, Geology 493, Michael McKinney, Fall, 2014
- Independent Study, Geology 493, Michael McKinney, Spring, 2015

Timeline, Major Milestones or Tasks

- Initial: Student interns are selected and begin training by City
- Mid-term: Student interns prepare short report on findings and meet with course instructor and City contacts to assess progress
- Final: Students submit final report and make a presentation to the City

Proposed Budget

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Ethical Needs Analysis for Collecting Citizen Input and the Development of a Computer-based Citizen Input Data Acquisition System (CIDAS)

Combined Scope of Work for Projects 2 & 3

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Ethical Needs Analysis and Development of CIDAS: Corey Divel, Planner, Development & Engineering Services, 423-479-1913/423-457-5303, cdivel@clevelandtn.gov

City of Cleveland Alternate Contacts
Ethical Needs Analysis and Development of CIDAS: Bryan Turner, Building Official, Department of Engineering & Development Services, 423-479-1913, bturner@clevelandtn.gov

Ethical Needs Analysis and Development of CIDAS: Greg Thomas, Planning Director, Department of Engineering & Development Services, 423-479-1913, gthomas@clevelandtn.gov

UT SCI Project Leads
Ethical Needs Analysis: Lisa Yamagata-Lynch, Associate Professor of Educational Psychology, 865-974-7712, LisaYL@utk.edu

Development of CIDAS: Xueping Li, Associate Professor, Department of Industrial and Systems Engineering, 865-974-7648, Xueping.Li@utk.edu

Project Overview

The City of Cleveland has identified a need for designing and developing a citizen input tool to capture the “true representation of their general citizen input” regarding current and future city development projects.

Purpose of Project

Ethical Needs Assessment:

- Identify the City of Cleveland needs for gaining “true representation” of citizen input.
• Identify ethical issues related to collecting, analyzing, storing, using, and presenting citizen input data for future city planning purposes.
• Identify recommendations for various methods for collecting a “true representation” of citizen data including computer-based surveys, social media, and city hosted face-to-face events.

Development of CIDAS:
• Develop a survey system/platform that allows for a static but systematic collection of data with citizen input across a range of city services and facilities.
• Build a dynamic element with one or more modules for specific purposes to collect data from various populations across the City of Cleveland.
• Allow data collection on particular topics such as citizen choices when allocating finite funds across a range of city services.

Desired Outcomes/Project Objectives

City of Cleveland

Ethical Needs Analysis
• Based on the IT595 student class projects, discussions, and presentations the City of Cleveland will be able to make an informed decision regarding how to collect citizen input.

Development of CIDAS
• The city will have a computer-based citizen input data acquisition system that allows data collection from citizens across a range of city services and facilities.

University of Tennessee

Ethical Needs Analysis
• IT595 students will explore and make decisions regarding recommendations related to ethical issues in instructional technology within a context of a real-life client project.

Development of CIDAS
• The research assistants (RAs) will apply what they have learned in the classroom to tackle real world problems. The problems in this project can also serve as case studies for future classes/students.

Final Deliverables/Work Products to City of Cleveland

Ethical Needs Analysis
• IT595 student team created Ethical Needs Analysis reports—students will synthesize what they have learned in class and the results of their research regarding the City of Cleveland needs to develop recommendations for implementing strategies for effectively gaining a “true representation” of citizen input.
Development of CIDAS

- The CIDAS system will be deployed to the city web site.

City of Cleveland Responsibilities

Ethical Needs Analysis

- Provide data and documentation related to past citizen input data collection methods.
- Participate in synchronous class meetings, and provide feedback to student presentations.
- Review course related asynchronous discussions and weekly updates from the instructor.

Development of CIDAS

- Provide detailed function requirements for the CIDAS system and help with data collection/needs analysis.
- With Cleveland Utilities personnel, facilitate the development and implementation of the CIDAS system.
- Meet regularly with UT faculty and students and facilitate involvement of related personnel to inform data collection and student understanding of the current IT systems and configuration.

University of Tennessee Responsibilities

Ethical Needs Analysis

- Procure and provide course texts, USB headphones with microphones, and webcams to the City of Cleveland.
- Assist in providing City of Cleveland representatives access into the course Blackboard site.
- Communicate with City staff throughout the project to maintain collaborative exchanges.
- Present project findings to the City and others, as deemed necessary.
- Communicate any issues or concerns regarding the project to SCI staff.

Development of CIDAS

- Students will determine the use of existing commercially available software for one or more of the CIDAS modules.
- Students will design, develop and deploy the CIDAS system.
- Students will prepare detailed documentation of the CIDAS system and user manuals.

Courses Represented

- IT595 Professional Ethics in Instructional Technology (Summer 2014)
- Information Systems Analysis and Design, IE421/428 (Spring 2015)

Timeline, Major Milestones or Tasks
Ethical Needs Analysis

- May—summer term begins class meets synchronously and start asynchronous activities for the 10-week course;
- June—course meets synchronously for mid-term report to the City;
- August—course meets synchronously for the last class and present final report to the City

Development of CIDAS

- August-December 2014: A graduate research assistant (GRA) starts to work on the CIDAS system as his/her independent study and/or research.
- January-April 2015: Spring IE421 teams, with the help of the GRA, work on the CIDAS project.
- March-June 2015: Deploy, test run and fine tune the CIDAS system.
- April 25, 2015: Written reports and supplementary student work delivered to municipal partners.

Proposed Budget

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Development of a Branding Plan for the City of Cleveland

Scope of Work for Project 4

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Corey Divel, City Planner, Department of Engineering & Development Services, 423-479-1913/423-457-5303, cdivel@clevelandtn.gov

City of Cleveland Alternate Contacts
Bryan Turner, Building Official, Department of Engineering & Development Services, 423-479-1913, bturner@clevelandtn.gov

Teresa Torbett, Community Development Coordinator, Department of Engineering & Development Services, 423-479-1913, ttorbett@clevelandtn.gov

Greg Thomas, Planning Director, Department of Engineering & Development Services, 423-479-1913, gthomas@clevelandtn.gov

UT SCI Project Lead
Deborah Shmerler, Associate Professor of Graphic Design, College of Arts and Sciences / School of Art, 865-789-2913, dshmerle@utk.edu

Project Overview

Two years ago Cleveland adopted “The City with Spirit” as the official city slogan. This slogan reflects the community’s strong work ethic, progressive attitude and significant religious heritage. However, the city needs a marketing strategy to incorporate the local identity with a clear message and consistent branding. This marketing plan will also assist further in creating and reinforcing this local identity. This plan could be used to develop a consistent style of public improvements in public spaces as well as consistent imagery and markings for local signage. The plan would also be used to promote tourism through the development of a signature branding message to the regional, national, and global marketplace.

Purpose of Project
To devise a Strategic Brand plan for the development of clear and consistent Brand messaging for the City of Cleveland. This plan is meant to aid in the development of a future Marketing Plan (TBD). The overarching goal is to discover what is unique about Cleveland to facilitate ways to attract businesses, promote tourism and create a stronger sense of place and pride for residents and business owners in the City of Cleveland.

**Desired Outcomes/Project Objectives**

**City of Cleveland**

- The objective is to develop a Brand Brief for the City of Cleveland which captures the essence of Cleveland to be used for future projects. The brief can be used to identify consistent themes and elements to be used for various public projects ranging from signage to the development of public spaces.

**University of Tennessee**

- Fall 2014: With assistance from the City’s SCI Community Enhancement Project Group, the objective is to develop a concise Brand Brief for Cleveland that outlines the City’s Vision, Mission and Brand Equity including its Promise, Position and Personality.
- Spring 2015: Pending approval of the Brand Brief by the City at the end of December 2014, the objectives for Spring 2015 will be to provide a variety of possible design directions as to how this brief and its messages can be played out visually and verbally. Specific applications TBD.

For students the desired learning outcomes include:

- Being able to understand and frame Design problems within social, cultural and technological contexts.
- Developing targeted interview questions and conducting interviews with a variety of audiences.
- Developing a targeted competitive audit.
- Being able to carry out directed research by analyzing an existing problem and by synthesizing these findings to develop a Brand Strategy.
- Writing a concise Brand Brief by evaluating and identifying the components of a successful brand including: brand equity, mindshare, promise, position and personality.
- Practice brainstorming techniques and other Design Thinking methods.
- Working on Interdisciplinary teams to develop holistic solutions to problems.
- Being able to analyze, criticize, execute and communicate design concepts in verbal, visual and written forms across various media.

**Final Deliverables/Work Products to City of Cleveland**
Fall 2014: A Brand Brief for the City of Cleveland that meets the desired outcomes and objectives and outlines the City’s unique aspects and qualities, including its Vision, Mission, and Brand Equity (e.g.: Promise, Position and Personality). This will lay the groundwork for the development of a future Marketing Plan.

Spring 2015: Presentation of a variety of visual concepts and suggestions for how the brand strategy and brief can be played out.

City of Cleveland Responsibilities

FALL 2014

• To facilitate and coordinate the interview process between The University of Tennessee ArtD451 students and a variety of Cleveland citizens including, but not limited to: City officials, the City Council, local business owners, the City Slogan Selection Committee, Citizens who submitted the entries into the City Slogan Competition in 2012, Phyllis Andersons’ Cleveland Middle School class and students and teachers from Lee University.
• To provide feedback and approval of Brand Brief by the end of December 2014.
• To provide feedback regarding Spring presentation of visual concepts by April 21st 2015.

University of Tennessee Responsibilities

Fall 2014

• To work collaboratively with other faculty and students from the University of Tennessee involved in the SCI Cleveland projects.
• To establish a set of targeted interview questions for a variety of Cleveland citizens to be reviewed and approved by the City of Cleveland SCI brand team before interviews take place.
• To make 2–3 site visits in Fall 2014 gathering visual documentation and forming objective observations about the spirit, values, lifestyle and geographic make up of the city. Students will pay particular attention to places where growth is already occurring organically and where people have taken ownership of their role as citizens, business owners and students.
• To translate information collected from Cleveland Interviews, Site Visits, Competitive Audits, Historical and Demographic research into a clear Brand Brief and Findings Report.
• After the above research phase is concluded, students will review the previously adopted City Slogan “The City With Spirit” and make recommendations as to its “appropriateness of fit” with their discoveries during the semester about the city and its future as outlined in the brief.
• To make a formal presentation of the conducted research including the Findings Report and Brand Brief to the City of Cleveland SCI branding team before the end of the fall 2014 semester. Date TBD before the beginning of the Fall 14 semester.
• Pending completion of a strategic brief by the students and approval of the brand brief by the City, if time permits students, will begin brainstorming on ways to translate this brief visually.

Spring 2015
• To work collaboratively with other faculty and students from the University of Tennessee involved in the SCI Cleveland projects.
• Pending sign off from the City of Cleveland on the brand recommendations by the end of December, an advanced individual problem solving independent study—ArtD494, or our on-site Design Center course—ArtD444, will continue to work on the concepts and brand strategies developed in ArtD451. Their main goal will be to visualize a variety of ways that the brand strategy can be played out in concert with the needs of the city and with other aspects of the Smart Cities Initiative.
• Towards the end of the Spring Semester, a presentation of these ideas will be made to Cleveland Project lead Corey Divel, and the Community Enhancement Project Group. Following this presentation, together we will determine how best to proceed in providing a solid direction for the City of Cleveland’s Brand Plan.

Courses Represented

• Fall 14: College of Arts and Sciences, School of Art / Advanced Graphic Design, Course # ARTD451, Deborah Shmerler
• (Pending) Spring 2015: College of Arts and Sciences, School of Art / Design Center, Course # ARTD444, Deborah Shmerler or College of Arts and Sciences, School of Art / Individual Problem Solving, Course # ARTD494, Deborah Shmerler

Timeline, Major Milestones or Tasks

Fall 2014

• August 21–October 21: Research, interviews and discussions with the City of Cleveland Officials, Business Owners and residents
• October 23–November 11: Reviewing Research and writing Brand Brief.
• November 13: Presentation of Research and Brand Brief to Janice Casteel, Corey Divel and the rest of the Community Enhancement Project Group. Presentation of Research and Brand Brief to Janice Casteel, Corey Divel and the rest of the Community Enhancement Project Group as well as the City Council.
• December 2: Classes End
• December 2014: Feedback and approval of the Brand Brief due from the Community Enhancement Project Group.

Spring 2015

• January 20th—April 3: Students working on visual concepts
• April 7: Presentation of visual concepts to Janice Casteel, Corey Divel, The Community Enhancement Project Group and the City Council.
• April 21: Feedback regarding presentation of directions due from Community Enhancement Project Group.
- April 25: Classes End

Proposed Budget

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TENTATIVE: ARTD 444/Spring 2015 (Standard Enrollment Course)

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Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Leads
Inman Street Sidewalks Lead: Brian Beck, City Engineer, office (423) 479-1913, bbeck@clevelandtn.gov

Inman Street Lane Reduction Lead: David Sheely, Assistant City Engineer, office (423) 479-1913, dsheely@clevelandtn.gov

Rail Underpass Study Lead: David Sheely, Assistant City Engineer, office (423) 479-1913, dsheely@clevelandtn.gov

Gateway and Streetscape Plan Lead: Bryan Turner, Building Inspector, office (423) 479-1913, bturner@clevelandtn.gov

City of Cleveland Alternate Contacts
Inman Street Projects Lead Coordinator: Greg Thomas, Planning Director/MPO Coordinator, office (423) 479-1913, gthomas@clevelandtn.gov

University of Tennessee SCI Project Lead
Jenny Retherford, Lecturer, (865) 974-2682, jgretherford@utk.edu

University of Tennessee SCI Alternate Contact
Rail Underpass Study Mentor: Matt Cate, TTAP Technical Assistance Coordinator, Center for Transportation Research, 86-974-4614, mcate@utk.edu

Project Overview
The four sub-projects described below are contiguous and related projects on the Inman Street Corridor from its western terminus at Keith Street running eastward to the Inman Street/Waterlevel Highway junction with the APD-40 By-pass. Development and development challenges differ along the corridor in these four areas. The environments of the four areas are, roughly speaking: a 1950s/1960s commercial area, a central business district, a mid-1800s railroad bed rising above the adjacent street level, and...
what was the western terminus of the “Copper Road” that served as the major access from minority and lower income neighborhoods of what is general known as “East Cleveland”.

While these sub-projects address specified issues for unique components of the Inman Street Corridor, consideration is necessary of the experience of the traveler along this entire segment of road. These four sub-projects will be analyzed and evaluated in detail individually, but will require consideration of the progress and development to produce final design recommendations that are consistent and coordinated.

**Plan for sidewalks on Inman Street from Broad Street to Keith Street (Sidewalk Plan)**

Inman Street passes east to west through the heart of Cleveland. The area west of Broad Street to Keith Street is a densely developed mid-1900s four lane commercial corridor mostly without sidewalks and without bus shelters. The Greenway is to be extended south to Inman Street and perhaps thence eastward along Woolen Mill Branch. The terrain falls rapidly westward from Broad Street and much of this area is generally level and poorly drained, being essentially creek bottom land that has been paved over for decades. Limited right of way (ROW), close buildings, and drainage will be key issues in planning for the needed sidewalks. Design alternatives should consider retaining the existing four-lane road and a lane reduction. Coordination should occur with traffic data and bus shelter projects also part of the UT SCI - Cleveland partnership when possible. Better accommodation of bicyclists should be a feature of the plan, though this may need to include parallel streets that access Inman through cross streets along this corridor. Inman Street is also a barrier for pedestrians, especially those which might come from neighborhoods to the north, because four lanes of traffic have to be crossed and traffic moves somewhat fast, thus hampering would-be development by businesses that would benefit from pedestrian access. Cleveland would expect to fund additional steps necessary to construct this long-sought project, which is consistent with the Metropolitan Planning Organization (MPO) 2035 Regional Transportation Plan and the 2008 MPO Bicycle and Pedestrian Plan, and the 2004 Downtown Master Plan through resources from the Cleveland Urban Area MPO and/or the Tennessee Department of Transportation (TDOT).

**A “Complete Streets” Plan for Reducing Lanes on Inman Street in the Central Business District (Complete Streets)**

This sub-project was originally proposed as part of Mainstreet Cleveland’s Downtown Plan and it has been carried forward to the Cleveland Comprehensive Plan and Central City Area Plan. It affects the part of Inman Street from Broad Street to the Southern Railroad underpass at the Five-Points area adjacent to the transit station in the historic depot. In the Five-Points area east of Church Street, businesses tend to front on Inman Street with little vehicle and pedestrian separation and no on-street parking. Narrowing Inman Street beginning west of Church Street would allow for wider pedestrian and sidewalk business areas along with landscaping, street furnishings, and on-street parking; provided that existing and anticipated traffic can be accommodated. The design would need to function with what is planned between Broad Street and Keith Street (a three-lane design in that area has implications for what can be done in the CBD, versus a four-lane design). Roadway drainage would also need to be addressed in
planning. Funding sources for future engineering and construction are yet to be identified, but the project would be eligible for a variety of transportation funding sources.

A Planning Study of Low-clearance Rail Underpass on Inman Street and Possibilities for Improvements (Rail Underpass)

Limited height beneath the Norfolk Southern Railroad underpass on Inman Street has long plagued Cleveland, with trucks and recreational vehicles (RVs) hitting the underpass roof and getting stuck underneath; incidents which are a regular occurrence that continue to happen despite warnings to drivers. This is a mainline railroad carrying well over 20 trains per day on track atop a fill bed that predates the Civil War. Beneath the underpass, Inman Street is at the bottom of a bowl that rises east and west of the railroad. Underground water is said to be present here. Infrastructure improvements, alterations in traffic, and or some combination of the two could possibly bring reasonable (in terms of cost/benefit) improvements within this constrained environment. Redevelopment of Inman Street in the CBD and in the Five Points area, and redevelopment in the East Inman Street area, could affect traffic using the underpass but it may also encourage additional traffic at the nearby Central Avenue at-grade rail crossing, especially if Central Avenue is improved to facilitate the cross-town flow of through traffic due to slower speeds in the CBD/Five Points area of Inman Street. Funding sources for future engineering and construction are yet to be identified, but the project would be eligible for a variety of transportation funding sources.

A Gateway and Streetscape Plan for Inman Street from the Railroad to the APD-40 By-pass (Streetscape)

This area runs eastward from the railroad through what has historically been the commercial and cultural center of the African American community to the APD-40 bypass at the only full cloverleaf intersection in Bradley County. In this section, Inman Street tapers from four to two lanes before widening to the four-lane divided Water Level Highway near the clover leaf. Difficulties in providing sewer service, a prior lack of zoning constraints, an old landfill, and other issues have led to junkyards and other such uses in this corridor which is in effect Cleveland’s entrance from nearby North Carolina and Georgia along U.S. 64/ Waterlevel Highway (future Appalachian Corridor K). Closer to the railroad in the historic African American area, problems of irregular lot sizes, deteriorated buildings, difficult business climate, and similar problems have plagued revitalization. A gateway plan is needed to address these issues. Transportation funding sources and other resources could be used to develop this project in phases as necessary and according to opportunities that arise. Based upon neighborhood meetings and the comprehensive planning process (where things like sidewalks, pedestrian level street lighting, parking, and retail development have been mentioned), it is likely that a prioritization of plan components is needed in the historic African American area.

Purpose of Projects

Sidewalk Plan
• Provide a pedestrian connection between the Central Business District and the commercial and business hub at the Village Green and the southern terminus of the Mouse Creek Greenway.

• Facilitate safe pedestrian access along Inman Street from nearby neighborhoods to the north, to shopping and employment, including safe access across Inman Street at various locations.

• Provide a safer and more accessible and comfortable environment for transit riders along Inman Street.

• Consider how bicyclists can be better accommodated on this route or in combination with an adjacent lower traffic route.

• Provide an opportunity for streetscaping and other elements consistent with the 2004 Downtown Master Plan.

**Complete Streets**

• Create a more pedestrian-friendly environment on Inman Street in the CBD as it approaches Five Points, while also accommodating transit riders and bicyclists in an area where vehicular delay, close building setbacks, multi-story structures, mixed uses, off-site parking, and regular civic use (parades, festivals, etc.) of the ROW and other public spaces are normative.

• Carry out aspects of the 2004 Downtown Master Plan that affect this area, considering the three-lane and narrow four-lane alternatives.

• Create space that allows for outdoor merchandising and customer use of sidewalk areas or adjacent courtyards along the Inman Street frontage, especially east of Church Street toward Five-Points where the building orientations are more generally with Inman Street frontage.

• Consider options for increasing on-street parking on Inman Street near Five Points.

• Consider the impact of the more pedestrian friendly environment in this portion of Inman Street on the adjacent street network and on operations such as Bradley EMS versus the opportunity to fill vacant building spaces through these improvements that will slow traffic on Inman Street in the CBD.

**Rail Underpass**

• Evaluate the existing and project future volumes of traffic on Inman Street, between Wildwood Avenue to the east of the railroad and Church Street to the west of the railroad, including turning movements, separating through traffic from that with an origin or destination within this portion of Inman Street or a nearby block.

• Evaluate accident history involving insufficient clearance in the underpass, considering the “before and after” effects of the latest warning system to alert drivers to the low clearance, and the effects of future traffic volume and mix based upon redevelopment.

• Assess what would have to be done to increase clearance in underpass in terms of costs and impacts, and benefits.

• Consider the possibility of increased traffic at the nearby Central Avenue at-grade rail crossing, especially if Central Avenue is improved between Keith Street and King Street as drivers seek to avoid slower traffic conditions in the Five Points area, and how this might be mitigated if it is a
safety concern (perhaps traffic to and from the area east of the railroad could be provided with a way to circumvent the more pedestrian oriented CBD/Five Points area of Inman Street in a place that is west of the underpass).

- Consider what treatments might be implemented in the underpass or along adjacent property to make it a more aesthetically blended transition between the CBD/Five Points and Inman Street East.

**Gateway and Streetscape**

- Develop a preliminary engineering design report that addresses the fact that the western end of the area is generally more heavy-commercial or industrial, and is likely to remain that way though it could be reshaped and improved with the extension of sewer and other City services upon annexation.
- Develop practical alternatives for improving aesthetics and transportation functionality along the corridor in this area from at least two perspectives: it is “Main Street” to people in adjacent neighborhoods on the western end (generally inside the City of Cleveland) and it transitions to more of a regional gateway near the by-pass.
- For the western end, from Bates Pike back to the railroad, create a streetscape plan that blends with that envisioned in the 2004 Downtown Master Plan which ends at the Inman Street and Wildwood Avenue intersection, including sidewalks where needed, lighting, street trees, etc.

**Desired Outcomes/Project Objectives**

**City of Cleveland**

**Sidewalk Plan**

- A safe and comfortable pedestrian environment on Inman Street from Broad Street to Keith Street, incorporating features such as traffic calming and protect crossing areas so that both sides of the street can be used by pedestrians.
- Make safe and convenient stopping areas for eastbound and westbound transit buses and comfortable bus stop/bus shelter areas for riders.
- Greater development opportunity for adjacent property owners due to improved bicycle/pedestrian and transit accessibility on this part of the Inman Street corridor, including consideration of connection from lower-traffic adjacent streets.
- Maintain access for existing businesses along Inman Street, but in redevelopment consider how driveways might be better defined and/or encourage vehicular access from adjacent street to improve streetscape on Inman Street.
- Make the area greener with street trees and better defined with signage and other streetscape features strengthening the downtown connection.
- Accommodate existing and future vehicular traffic on Inman Street.
Develop plan alternatives, a three-lane and (if possible) a four-lane version that work within existing ROW.

Complete Streets

- A more vibrant on-street environment in the Inman Street CBD area, especially near Five Points.
- Retail activity that builds on existing art and entertainment features and functions more heavily in the evening hours and on weekends.
- An attractive and comfortable street for walking, shopping dining, etc. that is linked to a residential base in adjacent upper-story housing and nearby neighborhoods.
- A street that accommodates, bicycle, pedestrian, and transit modes as well as automobiles.
- A street that does not sacrifice other functions of a primary CBD street for the accommodation of through traffic; e.g. a street where it is as important to “be” as to “get through”.

Rail Underpass

- Understanding of costs, impacts, and benefits of alternative methods for increasing clearance in the underpass (costs to design and build the improvements; impacts on surrounding buildings, infrastructure, and the environment; and benefits in relation to the existing and anticipated traffic that would otherwise be prevented from using the underpass due to low clearance).
- Continue to decrease, or prevent an increase in, crashes into the underpass due to insufficient clearance.
- Diversion of through vehicular traffic to other locations, such as Central Avenue without dramatically increasing the vehicular traffic at the at-grade crossing on Central Avenue, if diversion is needed and if conditions at the at-grade crossing are expected to present a safety concern.
- Encouragement of traffic in all modes that supports the redevelopment of the CBD/Five Points area and the Inman Street East area (a relatively higher use for access as compared with through movement).
- Treatment alternatives for the underpass that improve its aesthetic character in view of the proposed redevelopment.

Gateway and Streetscape

- A more comfortable pedestrian scale environment from Bates Pike back to the railroad, with inclusion of transit stop and bus shelter areas and provision for bicyclists.
- Increased market potential for lands west of the City limits to the APD-40 By-pass such that their eventual annexation and redevelopment is encouraged.

University of Tennessee
• Students will be supported through an investigation of existing site conditions and development of repair and infrastructure improvement recommendations to address right of way and drainage issues for the overall project.
• Students will evaluate the potential of re-design of Inman Street to address the various requests as described for all sub-projects.
• One overarching desired outcome of this project is the demonstration of effective engineering design process performed by undergraduate civil and environmental engineering students. This is accomplished through a supportive and active relationship between practicing engineers and the students.
• The project will also include development of construction documents to provide students an opportunity to communicate engineering design.
• University of Tennessee Center for Transportation Research (UT CTR): The “Rail Underpass” sub-project will provide an opportunity to engage CTR, UT Civil and Environmental Engineering (CEE) students, and the city of Cleveland in a comprehensive evaluation of transportation safety specific to the interaction between roadway and railway infrastructure. The final study should provide as an example for similar studies that are likely necessary in the city and region. The partnership between CTR and the UT students will promote the mission of CTR related to transportation safety.

Final Deliverables/Work Products

City of Cleveland

Sidewalk Plan

• Three-lane and four-lane alternative civil engineering designs that function within existing ROW.
• Streetscape sections with recommendations and specifications for signage, street furnishings, street trees, and other plantings consistent with the 2004 Downtown Master Plan, along with quantities and cost schedules. Necessary services and costs such as irrigation, trash collection, cleaning, and similar costs should be included in the plan report.
• A planning report that:
  o Includes alternatives for defining driveways and encouraging the use of adjacent streets for vehicular access to Inman Street businesses along with alternatives for parking that could potentially serve multiple businesses (the plan should not rely on involuntary alterations of access to existing businesses, though design alternatives exist for consideration).
  o Comprehensively assesses the adjacent street network in terms of how it might be used to enhance bicycle and pedestrian access, and whether it might be used as a means of providing convenient bus stops on the corridor that would not block a needed travel lane.
Is rooted in a realistic assessment, tied to the Comprehensive Plan, of the type of redevelopment that might occur along this portion of Inman Street, and the associated demands for travel and access by all modes if the plan is implemented.

Addresses the particular issues along this portion of Inman Street including traffic volume and speeds, pedestrian crossings, drainage, support of vehicular travel, and similar transportation issues.

**Complete Streets**

- Conceptual engineering design drawings of three-lane and four-lane alternatives including street cross sections and streetscape views.
- Streetscape sections with recommendations and specifications for signage, street furnishings, street trees, and other plantings consistent with the 2004 Downtown Master Plan, along with quantities and cost schedules. Necessary services and costs such as irrigation, trash collection, cleaning, and similar considerations should be included in the plan report.
- Evaluation of parking options within the design plans based upon the available space on Inman Street and in adjacent areas and upon the future mixture of uses within the area, e.g. short-term parking for businesses versus residential parking.

**Rail Underpass**

- An evaluation of alternatives for increasing clearance in the underpass, with a report including a determination of the relative costs, impacts, and benefits.
- Concept sketches for ideas considered in determining the costs, impacts, and benefits of alternatives for increasing the clearance in the underpass.
- Plan drawings for roadway improvements alternatives proposed to allow through traffic to divert away from the redeveloped area of Inman Street in the CBD/Five Points without necessitating the use on the Central Avenue crossing for those moving to and from areas east of the railroad.
- A report on existing and anticipated future traffic and turning movements in and around the Inman Street corridor from Church Street to Wildwood Avenue.
- Concept drawings of treatments that could be used to improve the aesthetics of the underpass.

**Streetscape**

- Concept drawings for streetscape, especially along the western portion from Bates Pike back to the railroad, and quantities and costs for sidewalks, street trees, lighting, bus stops, street furnishings, and similar amenities.
• Recommendations for strategic assembling of land, creation of parking opportunities behind the Inman Street block faces, and other such elements as may be necessary to support redevelopment.

City of Cleveland Responsibilities

• Provide existing drawings and GIS information needed for projects along with copies of relevant existing plans.
• Answer questions from UTK students and faculty relative to the execution of these projects.
• Provide timely review of draft work products.
• Thoroughly review final design concepts, recognizing that services performed by the students do not constitute professional engineering documents.

University of Tennessee SCI Responsibilities

• Frequent submittal of work for review (in accordance with the schedule provided below).
• Development of engineering calculations, engineering reports, and/or engineering drawings to convey design alternatives.
• Clarity of final design considerations to clearly define limits of analysis and evaluation.
• Provide well organized engineering documents suitable for review by a licensed engineer.
• Provide well organized design documents suitable for review by the project manager and other city planning officials.
• University of Tennessee Center for Transportation Research: Professional mentoring for students regarding transportation safety aspects of the project.

Courses Represented

• Senior Design Project, CE 400, Jennifer Retherford, Fall 2014
• Senior Design Project, CE 400, Jennifer Retherford, Spring 2015
• Senior Design Project, CE 400, Jennifer Retherford, Summer 2015 [tentative]
• UT Environmental Landscape Design Lab, Landscape Architecture, Brad Collett, Spring 2015

Timeline, Major Milestones or Tasks

FALL 2014

• Kick-off Meeting: Friday, August 22nd 2:30 – 4:40 pm, Knoxville, TN
• Site Visit: Friday, September 5th, Cleveland, TN (tentative); Saturday?
• Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.)
• Mid-Term Presentations October 13th or 15th, 2:30 – 3:30 pm, Knoxville, TN
• Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.) or in Cleveland?
• Final Presentations; need to discuss format; tentative dates near Thanksgiving holiday

SPRING 2015

• [Transitional] Kick-off Meeting (new students): Friday, January 9th 2:30 – 4:40 pm, Knoxville, TN
• Site Visit: Friday, January 16th, Cleveland, TN (tentative); Saturday?
• Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.)
• Mid-Term Presentations: March 13th or 15th, 2:30 – 3:30 pm, Knoxville, TN
• Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.) or in Cleveland?
• Final Presentations; need to discuss format; tentative dates near last week in April

SPRING 2015 [If Necessary]

• Schedule to be determined at a later date.

Proposed Budget

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Sidewalk Planning for Blythe Avenue & the Wildwood/Dalton Pike Area Neighborhoods

Scope of Work for Project 6

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee

City of Cleveland Project Lead
Sidewalk Planning for Blythe Avenue: Brian Beck, City Engineer, office 423-479-1913, bbeck@clevelandtn.gov

Sidewalk Planning for the Wildwood/Dalton Pike Area: David Sheely, Assistant City Engineer, office 423-479-1913, dsheely@clevelandtn.gov

City of Cleveland Alternate Project Contacts
Sidewalk Planning for Blythe Avenue: Tonya Young, Engineering Technician, office 423-479-1913, tyoung@clevelandtn.gov

Sidewalk Planning for the Wildwood/Dalton Pike Area: Teresa Torbett, Grant Coordinator, office 423-479-1913, ttorbett@clevelandtn.gov

Dustin Tommey, Impact Cleveland, 423-472-9876, impactclevelandtn@gmail.com

UT SCI Project Leads
Chris Cherry, Associate Professor, (865) 974-7710, cherry@utk.edu

Jenny Retherford, Lecturer, (865) 974-2682, jgretherford@utk.edu

Project Overview

The two sub-projects described below are contiguous and related projects incorporating the neighboring communities of Blythe Avenue and Wildwood Avenue. While these sub-projects address specified issues for unique components of two defined neighboring areas, consideration is necessary of the experience of the pedestrian within the entire region. These two sub-projects will be analyzed and evaluated in detail individually, but will require consideration of the progress and development to produce final design recommendations that are consistent and coordinated.
Sidewalk Planning for Blythe Avenue

A sidewalk need along Blythe Avenue from 12th Street SE to 20th Street SE has been identified by neighborhood residents and is consistent with the 2008 Bicycle Pedestrian Plan and the Central City Area Plan. Combined with existing sidewalks and sidewalks under development (recently submitted to the Tennessee Department of Transportation (TDOT) Multi-modal Access grant program), a new sidewalk would complete a pedestrian friendly perimeter to the neighborhood and connect with Blythe-Bower elementary schools, shopping, and social services (Blythe Avenue Family Services Center). Topography, drainage, narrow right of way (ROW), small lots with houses near the street, limited parking, and economic hardship will be issues in this planning process. The work should be sufficient to establish National Environmental Policy Act (NEPA) “purpose and need” in the event of future federal funding through the Metropolitan Planning Organization (MPO) for ROW and construction.

Sidewalk Planning for the Wildwood/Dalton Pike Area

Plan for Neighborhood Connector Sidewalks to Wildwood Avenue/Dalton Pike --- A sidewalk extension along the major corridor Wildwood Avenue/Dalton Pike from 9th Street SE to Treasury Drive near Walmart has been funded through a TDOT Multi-modal Access Grant. The sidewalk on Wildwood Avenue/Dalton Pike will transition from the west (Blythe Bower School side) to the east side of the street in the area south of 20th Street near the split of Blackburn Road off of Wildwood/Dalton Pike. This will maximize the adjacency to neighborhoods since these are mostly on the east side from this area southward. It will also allow coordination with a planned drainage project and allow for some slope work on steep banks in inside curves where erosion and visibility problems occur. A plan for sidewalk connections of neighborhood streets to the Wildwood Avenue/Dalton Pike sidewalk is important. Connectivity to school, employment, and shopping are important as are mitigation of impacts along the sidewalk route and costs. Information about alternatives should be sufficient for public presentation and input to discuss ideas with neighborhood residents and elected officials. The work should be sufficient to establish NEPA “purpose and need” in the event of future federal funding through the MPO for ROW and construction. Various transportation funding sources could be available for construction including future rounds of the TDOT Multi-modal Access Grant program.

Purpose of Projects

Sidewalk Planning for Blythe Avenue

- Evaluate alternative routes for a sidewalk from the south end of the existing sidewalk on Blythe Avenue near Blythe Family Support Center to 20th Street SE where a connection should be made to the sidewalk running in front of Blythe-Bower Elementary School.
- Develop design alternatives for the improvements of the Blythe Avenue area. Improvements should include sidewalks to promote pedestrian access with thoughtful coordination with existing infrastructure and neighborhood amenities. Evaluation of topography, drainage, right of way, traffic routing, and parking should be included in the design considerations.
- Assess alternatives in terms of pedestrian connectivity for neighborhood residents as well as impacts on driveways and other features of residential properties and other properties adjacent
to the route. Assess impacts on neighborhood drainage, streets, utilities, anticipated costs of construction, and similar infrastructure considerations.

- Further develop capacity of New Blythe Avenue Neighborhood Association, with assistance from Impact Cleveland and Lee University, by involving them and area residents in the sidewalk planning.

**Sidewalk Planning for the Wildwood/Dalton Pike Area**

- Evaluate alternative routes for sidewalks connecting from adjacent neighborhoods to the sidewalk on Wildwood Avenue/Dalton Pike.
- Provide a connector sidewalk plan that provides neighborhood residents with pedestrian access to employment, shopping, and essential services.
- Provide a connector sidewalk plan that coordinates with existing and planned bus routes, bus stops, and bus shelters along or near the Wildwood Avenue/Dalton Pike corridor.
- Assess alternatives in terms of pedestrian connectivity for neighborhood residents; impacts on driveways and other features of residential properties and other properties adjacent to the route, impacts on neighborhood drainage; impacts on streets; impacts on utilities; anticipated costs of construction, etc.

**Desired Outcomes/Project Objectives**

**City of Cleveland**

**Sidewalk Planning for Blythe Avenue**

- Identify a route for the Blythe Avenue area sidewalk extension to 20th Street SE that provides north-south pedestrian access through the neighborhood that is convenient for a majority of residents.
- Identify a route for the Blythe Avenue area sidewalk extension to 20th Street SE that provides the desired pedestrian mobility for residents while mitigating the impacts to existing properties, streets and utilities, drainage, and streets.
- Build capacity in the neighborhood, through the New Blythe Avenue Neighborhood Association working with Impact Cleveland, for neighborhood level planning using the sidewalk planning process as hands-on experience to improve skills of neighborhood residents in neighborhood planning and civic involvement, while building relationships with and between neighborhood residents and others in the planning process. (Lee University will be assisting with this effort in a separate SCI project focused on neighborhood resident involvement and capacity building).

**Sidewalk Planning for the Wildwood/Dalton Pike Area**

- Develop a logical division of the neighborhood areas along the Wildwood Avenue/Dalton Pike corridor that will lend itself to analysis for connector sidewalks (ideally perhaps not more than 6 such divisions), and provide preferred routes and priority routes for each of these divisions.
• Identify preferred routes for neighborhood connector sidewalks along the Wildwood Avenue/Dalton Pike corridor based upon the relative strength as determined by the various impact criteria.
• Develop neighborhood connector route priorities based upon the user need, number of users served, and pedestrian (and transit) connections facilitated to employment, shopping, and essential services.
• Provide information to Impact Cleveland which will subsequently assist neighborhood residents in the further development of the neighborhood connector sidewalks in the area which will have benefitted from the capacity building effort of Lee University under the SCI program

University of Tennessee

• Students will be supported through an investigation of existing site conditions and development infrastructure improvement recommendations to address safe pedestrian access in the defined neighborhoods.
• Students will evaluate the potential of re-design of various roads to address the various requests as described for all sub-projects.
• One overarching desired outcome of this project is the demonstration of effective engineering design process performed by undergraduate civil and environmental engineering students. This is accomplished through a supportive and active relationship between practicing engineers and the students.
• The project will also include development of construction documents to provide students an opportunity to communicate engineering design.

Final Deliverables/Work Products to City of Cleveland

Sidewalk Planning for Blythe Avenue

• Report and maps presenting comparative analysis for at least three alternative routes. Report should include street photos, estimated ROW, review of anticipated impacts of sidewalk construction on each route, quantities and planning-level cost estimates for sidewalk construction along each route. The estimates should include work likely to be required for ADA, for drainage and utilities, retaining walls, driveway reconstruction, and similar considerations.
• Recommendations regarding a preferred route for the sidewalk extension; why the route is preferred over other alternatives; possible project phasing and associated costs with each phase (ideally not more than two phases); and other recommendations that emerge from the planning process.

Sidewalk Planning for the Wildwood/Dalton Pike Area

• Report and maps presenting comparative analysis for alternative connector sidewalk routes from each of the neighborhood divisions described above. Report should include street photos, estimated ROW, review of anticipated impacts of sidewalk construction on each route,
quantities and planning-level cost estimates for sidewalk construction along each route. The estimates should include work likely to be required for ADA, for drainage and utilities, retaining walls, driveway reconstruction, etc.

- Recommendations regarding a preferred route for connector sidewalks; why the route is preferred over other alternatives; possible project phasing and associated costs with each phase (ideally not more than two phases); and other recommendations that emerge from the planning process.
- Recommendations on priority neighborhood connector sidewalks based upon the criteria described above.

City of Cleveland Responsibilities

- Provide existing drawings and GIS information needed for projects along with copies of relevant existing plans.
- Answer questions from UTK students and faculty relative to the execution of these projects.
- Provide timely review of draft work products.
- Thoroughly review final design concepts, recognizing that services performed by the students do not constitute professional engineering documents.

University of Tennessee SCI Responsibilities

- Periodic submittal of work for review (in accordance with the schedule provided below).
- Development of engineering calculations, engineering reports, and/or engineering drawings to convey design alternatives.
- Clarity of final design considerations to clearly define limits of analysis and evaluation.

Courses Represented

- Sustainable Transportation, CE 595, Chris Cherry, Fall 2014
- Senior Design Project, CE 400, Jennifer Retherford, Spring 2015 (if necessary; RE: drainage, ROW, survey/geotechnical)

Timeline, Major Milestones or Tasks

FALL 2014

- Kick-off Meeting: Friday, August 22nd 2:30 – 4:40 pm, Knoxville, TN
- Site Visit: Friday, September 5th, Cleveland, TN
- Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.)
- Mid-Term Presentations October 13th or 15th, 2:30 – 3:30 pm, Knoxville, TN
- Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.) or in Cleveland?
• Final Presentations; need to discuss format and locations; tentative dates near Thanksgiving holiday

**SPRING 2015**

• Kick-off Meeting: Friday, January 9\textsuperscript{th} 2:30 – 4:40 pm, Knoxville, TN
• Site Visit: Friday, January 16\textsuperscript{th}, Cleveland, TN
• Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.)
• Mid-Term Presentations: March 13\textsuperscript{th} or 15\textsuperscript{th}, 2:30 – 3:30 pm, Knoxville, TN
• Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.) or in Cleveland?
• Final Presentations; need to discuss format and locations; tentative dates near last week in April

**Proposed Budget**

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**TENTATIVE: CE 400/Spring 2015 (Standard Enrollment Course)**

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Scope of Work for Project 7

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Greg Thomas, Planning Director, Department of Engineering & Development Services, 423-479-1913, gthomas@clevelandtn.gov

Doug Berry, dberry@clevelandtn.gov

UT SCI Project Lead
Brad Collett, Assistant Professor, UT Landscape Architecture Program, 865-974-7176, bcollett@utk.edu

Project Overview

Plan for extending the Greenway along Woolen Mill Branch—several miles of Greenway have already been constructed along South Mouse Creek. The Greenway is presently intended to terminate along South Mouse Creek at the Village Green shopping center on the southeast corner of Inman Street and Keith Street, a large 1960s era shopping that has found new life as an office and retail complex. The Village Green is enveloped by South Mouse Creek on its west side and by Woolen Mill Branch on its north and east side. Streets and buildings are generally built adjacent or over Woolen Mill Branch as it winds its way across town from south of the Whirlpool plant site. Opening some of the Woolen Branch with a stream buffer area could provide environmental, flood control, and recreational and amenity benefits for downtown Cleveland. Challenges would include impacts on existing businesses and the street network, and with all of that cost. But a planning analysis is needed to identify potential opportunities, benefits, and costs. The SCI project would position Cleveland to seek public and private funding for further design and development of a Greenway extension along Woolen Mill Branch where that stream and its banks are uncovered. The Greenway has proven to attract thousands of walkers and bicyclists and to benefit adjacent businesses.

Purpose of Project

• To understand opportunities and constraints, and develop design proposals for the restoration of the Woolen Mill Branch (between the Village Green shopping center and its origins south of the Whirlpool site? Please confirm intended limits of work) as a recreational amenity and
pedestrian connection between south Cleveland neighborhoods, downtown, and the South
Mouse Creek Greenway
• To explore the ways that the Woolen Mill Branch may perform as a stormwater management
infrastructure while also providing social, recreational, and other environmental benefits.

Desired Outcomes/Project Objectives

City of Cleveland

University of Tennessee

• To critically assess the existing condition of the Woolen Mill Branch
• To identify opportunities, challenges, and feasibility of restoring the Woolen Mill Branch as a
functioning pedestrian greenway and performing stormwater infrastructure
• To propose restoration and greenway design concepts for the Woolen Mill Branch corridor with
an emphasis on stormwater performance and best management practice demonstration
• To assist City in the calculation of order of magnitude costs for greenway implementation
strategies

Final Deliverables/Work Products to City of Cleveland

• Woolen Mill Branch Corridor Inventory and Analysis: Student participant(s) will research,
document, and analyze the existing physical condition of the corridor and its context, as well as
other relevant systems and conditions that would influence opportunities and challenges to its
future restoration and development as a pedestrian greenway and stormwater infrastructure.
Findings will be presented in a graphic format with supporting narrative.
• Site Selection, Programming and Precedent Studies: Based on completed inventory and
analysis, student(s) will identify feasible levels of intervention along the Woolen Mill Branch
Corridor, including programmatic proposals and focus areas for detailed design development.
Precedents related to their proposals will be studied and presented.
• Greenway Vision Plan: Student(s) will prepare conceptual restoration and design proposals for
areas of the Woolen Mill Branch corridor where interventions have been determined feasible
Contemporary strategies in sustainable urban design, green infrastructure, and disaster
mitigation shall be emphasized. Proposals will focus on strategic programming and the
planning/design of the physical environment, infrastructure, landscape elements, and their
performance benefits. Concepts will be communicated graphically using methods such as
diagrams, plans, sections, and illustrative perspectives as determined appropriate, as well as
supporting narrative.

City of Cleveland Responsibilities
• To work cooperatively with students and faculty to develop a shared understanding of existing conditions, key opportunities and challenges, as well as existing initiatives, research, and stream quality assessments related to the Woolen Mill Branch
• To work cooperatively with student(s) and faculty to assess feasibility and limitations of potential implantation strategies
• To assume primary responsibility for order of magnitude cost estimation with the support of information (take offs, materials, etc.) from student(s)
• To provide technical assistance and data in a timely fashion, including but not limited to available planning documents, maps, and studies, determined relevant and necessary to completing the scope of work
• To identify relevant City staff, internal/external partners, and other project stakeholders
• To convene City staff, internal/external partners, and other project stakeholders in a timely fashion to review and/or provide project input as determined necessary
• To foster an positive working environment through which educational and project objectives can be achieved

University of Tennessee Responsibilities

Courses Represented

• LAR Environmental Design Lab, Brad Collett, Spring 2015

Timeline, Major Milestones or Tasks

• January: Project kickoff meeting and site visit in Cleveland, staff to meet with student and faculty to introduce project and offer orientation to the City, context for project, and project objectives
• February: Students and faculty return to City on an as-needed basis for inventory and analysis research, data gathering, and interactions with partners and stakeholders. Students shall present their assessment to the City. An emphasis is placed on completing the site selection study, programming, and precedent research. Site selection findings and precedents will be presented to the City, and subject sites for design and planning study are finalized by mid-month.
• March: Planning and design studies for selected sites begins
• April: Planning and design + cost estimation studies are completed. Students present planning and design progress to the City. Final presentations are made to the City

Proposed Budget

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University of Tennessee, Knoxville—City of Cleveland, TN  
Smart Communities Initiative

Bus Shelter Planning & Design

Scope of Work for Project 8

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Robert Varnell, Assistant Director of CUATS, office 423-478-1396, rvarnell@sethra.us

City of Cleveland Project Alternate Contacts
Greg Thomas, Planning Director/MPO Coordinator, office 423-479-1913, gthomas@clevelandtn.gov

UT SCI Project Lead
Chris Cherry, Associate Professor, (865) 974-7710, cherry@utk.edu

Project Overview

Recently, the Cleveland Urban Area Transit System (CUATS) updated its transit plan with a route study and other information in cooperation with the Metropolitan Planning Organization (MPO). Bus shelters do not presently exist along bus routes. Pedestrian access and other issues are also problems at some bus stop locations. Strategically located bus shelters and other improvements to bus stop locations should make transit use easier for many riders. Proposed bus stop locations and shelters are addressed in the transit route planning document. However, a stakeholder group has recently formed and is providing more input on route locations and other possible alterations or improvements in service to enhance job access for the transit dependent population. In addition, more detailed information is needed about pedestrian connections and the available sites for bus stops and bus shelter locations as well as prioritization for bus shelter locations. One concept discussed by the stakeholder group is some possible pick-up/drop-off point at the Blythe Family Support Center where people in the nearby neighborhood(s) could connect with specially routed buses, perhaps through a contract service, that would take them to and from locations near major employment centers on a schedule consistent with shift change times. Such pick-up/drop-off points might entail a “super stop” or “super shelter” that would need to be part of the planning process. At the same time, discussion has been occurring at the MPO board about service alterations that would provide linkages for employees to other nearby urban transit systems in Chattanooga and Dalton; something which could require a transfer point with some
Planning information is needed to inform design criteria for bus shelters as well as strategies for paying for the shelters (acquisition, construction, and long term maintenance). Public/private partnerships that involve the provision of advertising space are a possibility that should be explored in the planning effort. This effort can demonstrate the linkage between project planning and design that is part of system preservation and security. It can also support the planning goal of encouraging the use of alternative modes of transportation by enhancing the safety, comfort, and convenience of transit riders through good design of bus stops, shelters, and associated facilities.

Purpose of Project

- Assess the current route plan in conjunction with new ideas and concerns being brought forward by stakeholders and the MPO Board, especially those related to transit-dependent employees or labor force, and other existing and potential transit users.
- Determine optimum locations for stops and shelters in terms of concentrations of existing transit-dependent and potentially “transit-preferenced” persons near existing or proposed routes or service extensions.
- Determine a grid or filter through which to prioritize potential stop and shelter locations based upon need, potential ridership served, and the quality and pedestrian accessibility features/needs of potential locations.
- Develop various transportation plans to identify preferred locations for bus shelters with consideration of all forms of transportation and other community infrastructure.
- Plan for the programmatic and facility needs for a sustainable transit system as it responds to shifting user demands by informing bus shelter designs that are adaptable, expandable, user friendly (security conscious, comfortable, well-maintained, etc.), economical (for manufacture, purchase, installation, and maintenance), and capable of supporting advertising as means of defraying costs.
- Form a model working planning linkage between transit planners, transit operators, transit users, and other stakeholders with designers who will develop transit shelter design criteria and prototype shelters.

Desired Outcomes/Project Objectives

City of Cleveland

- Increased understanding of local transit needs and potential improvements by the public, transit planners, transit operators, stakeholders, and the MPO Board
- Prioritization of bus stop and shelter locations, considering concentrations of transit-dependent and potentially “transit-preferenced” persons and field conditions such as pedestrian access, etc.
- Shared understanding by public, transit planners, transit operators, stakeholders, the MPO Board, and designers regarding the physical characteristics of a sustainable bus shelter in the existing and planned Cleveland transit operating environment where such shelter would be adaptable, expandable, user friendly (security conscious, comfortable, well-maintained, etc.),
economical (for manufacture, purchase, installation, and maintenance), and capable of supporting advertising as means of defraying costs.

- Energize a functioning group of the public, transit planners, transit operators, and stakeholders for on-going planning and development of the transit system.
- Model a process whereby sound planning is integrated in the development of a sustainable bus shelter design for application by CUATS and in comparable small urban transit systems, such that the process is transferrable to the development of other equipment, facilities, furnishings, and hardware used to provide transit services that is responsive to needs and which encourages increased ridership.

**University of Tennessee**

- It is expected that students will be supported through the evaluation of the current transportation network and development of a transportation plan that recommends preferred locations for bus shelters.
- Technical support as well as feedback and discussion related to professional practice for transportation planning projects is preferred.
- The final project will provide students an opportunity to demonstrate engineering analysis principles regarding transportation planning. Ideally, the final project provides information for future engineering work and implementation of a design solution.

**Final Deliverables/Work Products to City of Cleveland**

- Report reviewing and updating the needs assessment (include optimum locations and prioritization through grid/filter described above), identification of existing routes and services, identification of route and service gaps and priorities, and recommendations for changes, additions, and improvements, based upon recent input from stakeholders and the MPO board and other information, especially as these relate to bus stops and bus shelters.
- A written report describing a recommended process for collaborative transit planning review by stakeholders, transit operators, and transit planners with public review.
- A written report including a description of how planning was used to inform the design process for the bus shelters, and how designers were a part of a planning decision making in an iterative process that began with basic questions like “where do we put shelters?” and “how must the shelters perform?”

**City of Cleveland Responsibilities**

- Provide existing drawings and GIS information needed for projects along with copies of relevant existing plans.
- Answer questions from UTK students and faculty relative to the execution of these projects.
- Provide timely review of draft work products.
- Thoroughly review final design concepts, recognizing that services performed by the students do not constitute professional engineering documents.
University of Tennessee Responsibilities

- Develop a bus shelter plan that includes priorities for the city of Cleveland.
- Provide periodic updates regarding the evaluation and design process.

Courses Represented

- Planning and Transportation, CE 558, Chris Cherry, Spring 2015

Timeline, Major Milestones or Tasks

- Kick-off Meeting: Friday, January 9\textsuperscript{th} 2:30 – 4:40 pm, Knoxville, TN
- Site Visit: Friday, January 16\textsuperscript{th}, Cleveland, TN (tentative); Saturday?
- Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.)
- Mid-Term Presentations: March 13\textsuperscript{th} or 15\textsuperscript{th}, 2:30 – 3:30 pm, Knoxville, TN
- Mid-Term Meeting: Student Progress, Feedback Opportunity; online (Skype, GoToMeeting, etc.) or in Cleveland
- Final Presentations; need to discuss format; tentative dates near last week in April

Proposed Budget

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University of Tennessee, Knoxville—City of Cleveland, TN
Smart Communities Initiative

Cherokee Hotel (Cleveland Summit) Renovation

Scope of Work for Project 9

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Sharon Marr, Mainstreet Cleveland, 423-479-1000/423-593-3098, mainstreet@clevelandtn.gov

City of Cleveland External Stakeholders
Doug Caywood, The Lewis Group Architects, 423.476.0012, dcaaywood@lewisgroup.net

UT SCI Project Specific Contacts
Mary Beth Robinson, Adjunct Professor, 865-387-0977, mrobin15@utk.edu

Project Overview

From its impressive beginnings, The Cherokee Hotel has been a significant landmark for Cleveland. After opening in March 1928, the hotel was not just a place to accommodate visitors, but an important social hub for community organizations; a place to see and be seen. In the decades to follow, the hotel hosted many important visitors from statesmen to Hollywood stars representing now a treasure-trove of community memories. In recent years, the Cherokee Hotel is no longer a home-away-from-home for travelers, or a center for local organizations to meet and host events. The once hospitality icon is now a Section 8 housing facility. Many of the cherished architectural details are deteriorating; some covered up or removed. Revitalizing Cleveland’s downtown center necessitates restoring a structure holding such a rich heritage. Restoration of the hotel brings important revitalizing components that would support much needed public engagement to the downtown area. Food service, retail, visitor accommodations, event spaces, and possible residential in the form of condominiums are all potential outcomes that will support a higher level of community engagement in downtown Cleveland.

Purpose of Project

- Research history of the Cherokee Hotel that opened on March 9, 1928
- Develop design concepts to return the existing facility back to its original historical character while maintaining a balance of downtown hotel rooms and potential upper floor condominiums
- Move forward the revitalization plans for the Cherokee Hotel as previously conceived since its inclusion in the 2004 Downtown Cleveland Master Plan developed by Ross/Fowler.
• Assist in creating a downtown historic district with the efforts of the Southeast Tennessee Development District (SETDD) currently working on the initial applications for the National Park Service and the individual nomination for the Cherokee Hotel/Cleveland Summit site.

Desired Outcomes/Project Objectives

City of Cleveland

• To retrieve a historic landmark for downtown Cleveland with the Cherokee Hotel and to provide hotel accommodations in downtown in this historic facility.

University of Tennessee

• To provide a historic preservation design studio experience for a 4th year interior design studio.
• Students will gain exposure to research for a historic structure, as-built measuring and documentation.
• Students will develop a comprehensive program to include clear goals and objectives, review of issues and facts (site, user, and context).
• Students will analyze existing square footage to program requirements for maximum space utilization.
• Students will analyze existing spatial volumes, architectural elements, and circulation.
• Students will evaluate the facility for various codes and ADA compliance.
• Students will study site issues to maximize the connections between interior and exterior spaces. Review, recommendations, and assistance with landscape architecture program will be coordinated.
• Students will explore design concepts that address the importance of the building’s heritage as an historic structure.
• Student will generate plans, sections, elevations, interior millwork details, suggestions for interior furnishings, fixtures and equipment, interior materials, and finishes that support a comprehensive conceptual approach.
• Students will render perspective views of key interior spaces to illustrate the hotel’s potential future.
• Potential collaboration with Melissa Mortimer at SETDD with the application process.

Final Deliverables/Work Products to City of Cleveland

• A collaborative design document including the historical information on the property and a compilation of the design and development options.

City of Cleveland Responsibilities

• Provision of any maps, parcel information, historical interviews. Review of parking requirements and options upon development of the hotel concept.

University of Tennessee Responsibilities
Working with the City of Cleveland, Douglas B. Caywood from The Lewis Group Architects, Sharon Marr from Mainstreet Cleveland, the property owner, and other parties as designated by the team to obtain and compile the required data, measurements, historical information, and develop proposals that represent a new beginning for the historic landmark hotel.

Courses Represented

- IDS 471 Advanced Interior Design Studio, Mary Beth Robinson, Fall Semester 2014

Timeline, Major Milestones or Tasks

- Week of Sept 8, 2014: Site visit and orientation, begin research of location, site and structure; interview client(s) for developing project program
- Week of October 06, 2014: Completion of programming and schematic design options for client review
- November 25, 2014: Final project review; final presentation of research, project design development and specifications

Proposed Budget

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Housing Conditions Survey for Central City Area and CDBG Target Area

Scope of Work for Project 10

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Tonya Young, Engineering Technician, 423-479-1913, tyoung@clevelandtn.gov

City of Cleveland Project Alternate Contacts
Bryan Turner, Building Inspector, office 423-479-1913, bturner@clevelandtn.gov
Teresa Torbett, Grants Coordinator, office 423-479-1913, ttorbett@clevelandtn.gov

UT SCI Project Lead
Dr. Tim Ezzell, Political Science, 865-974-9036, tezzell@utk.edu

Project Overview

Housing Conditions Survey for Central City Area and CDBG target area--- these areas are generally located in the Central City Plan area and the southeastern part of downtown. Here is the oldest housing stock, greater concentrations of rental housing, greater concentrations of low-income population, greater racial and ethnic diversity, a greater incidence of code violations pertaining to building and lot conditions, etc. Impact Cleveland is poised to conduct detailed resident interviews to ascertain community needs, using an existing survey tool and working in cooperation with Lee University and Habitat for Humanity. This effort is concentrated around the Blythe Avenue Safe Haven social service center (a former elementary school) where Cleveland is seeking to provide sidewalk and bus shelter improvements with funding from TDOT’s Multi-modal Access Grants program. Habitat and others will cooperate in a privately funded housing rehabilitation effort in this Blythe Avenue area. What is needed is a survey of the physical conditions of the housing in the Central City Area and CDBG target area, including the Blythe Avenue area, to help better direct public and private resources for housing and neighborhood improvement.

Purpose of Project
• Rate the physical conditions of individual housing units or structures (a structure may contain multiple dwelling units) within a geographic area consisting of the Central City Area and the CDBG target area.
• Combine the physical conditions ratings of housing units/structures with data from the Property Assessor, the Census, and/or other sources to supplement the information in the housing rating to provide a clearer picture of housing conditions.
• Analyze the physical conditions ratings of housing units/structures and supplementary information to inform plan and policy formation in housing and community development

Desired Outcomes/Project Objectives

City of Cleveland

• Improved information to know where conditions are severe enough to make the economic feasibility of repairs doubtful, and where economically feasible repairs could save the housing.
• Improved information to strategically focus investments in housing, infrastructure, code enforcement, etc.
• Encouragement of private and non-profit sector reinvestment in neighborhood housing stock

University of Tennessee

• Introduce students to fundamental concepts of housing policy
• Develop basic understanding community engagement concepts
• Develop and implement survey methodology
• Test and evaluate survey tools and methods
• Conduct survey and develop housing report to include areas of concern, priorities, and recommendations

Final Deliverables/Work Products to City of Cleveland

• An acceptable survey tool and process that can be used with minimal training to rate the physical condition of housing units/structures through a windshield survey.
• Training materials for the survey process and tool that presents several applications of the tool to housing units in different structure types and in different states of repair
• Conduct the survey and rating within the defined area and provide maps and tabular data to present the findings
• A Housing Conditions Report for the defined geographic area that presents the findings of the housing conditions ratings analyzed along with the supplementary data

City of Cleveland Responsibilities

• Provide map of area where housing conditions survey is to be implemented by UTK students
• Assist with informing public of survey
• Provide evaluation and feedback on design, implementation, and reporting of survey
University of Tennessee SCI Responsibilities

- Incorporate survey into existing class curriculum
- Maintain communication channels with project sponsor
- Conduct survey in a safe and timely manner
- Conduct survey that respects local residents and abides by established ethical research standards
- Conduct site visits to project area

Courses Represented

- POLS 581/410 Fundamentals of Planning, Spring 2015

Timeline, Major Milestones or Tasks

- Early tem: meet with local representative(s); Discuss Housing policies with local HUD office; Device project methodology and IRB requirements (if applicable).
- Develop work groups and assign tasks; Conduct survey and compile data.
- Develop priorities and recommendations; Produce final report.

Proposed Budget

**POLS 581, 410/Spring 2015 (Standard Enrollment Course)**

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Central City Brownfield Redevelopment Plan

Scope of Work for Project 12

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Greg Thomas, Planning Director/MPO Coordinator, office 423-479-1913, gthomas@clevelandtn.gov
Doug Berry, dberry@clevelandtn.gov

UT SCI Project Lead
Brad Collett, Assistant Professor, UT Landscape Architecture Program, 865-974-7176, bcollett@utk.edu

Project Overview

Redevelopment plan for Central City brownfield area --- this is part of the Central City Area Plan and involves mostly older railroad-oriented industrial properties that are in need of re-development. A primary economic driver in the area will be the redevelopment of portions of the adjacent 90 acre Whirlpool site after relocation to the new factory site a few miles away is complete. A brownfield redevelopment plan needs to be done that deals with brownfield properties, those inside the Whirlpool boundaries and those nearby, and the adjacent residential areas. Within the Whirlpool site there are some buildings that will likely remain and others that will be demolished and property that may remain in use by the company or sold to others. There may be opportunities to reopen portions of the enclosed Woolen Mill Branch that crosses the site and to create additional green area in what may become a mixed use environment. The City has joined in a regional assessment grant coalition to EPA and these funds could be available for some site assessments in this SCI Project area. The City has previously submitted a Brownfield Planning Grant proposal to EPA as well as a Brownfield Assessment Grant application, so there is quite a bit of information about the area and TDEC and EPA are familiar with it. Funding for long-term implementation of this project would likely be from a variety of public and private sources.

Purpose of Project

- To explore brownfield remediation strategies for strategically identified post-industrial sites in the City of Cleveland so as to enable their future redevelopment
• To explore the redevelopment of strategically identified properties within the City of Cleveland as an opportunity to accommodate anticipated economic (jobs) and population growth, thus mitigating adverse impacts of conventional sprawl patterned growth to scenic and productive landscapes

**Desired Outcomes/Project Objectives**

**City of Cleveland**

**University of Tennessee**

• To critically assess prevailing growth pattern and identify related social, economic, and environmental impacts
• To critically assess existing planning and zoning regulations against desired future growth strategies and patterns – compact development, redevelopment
• With the support of City staff, to identify properties and/or structures in the City of Cleveland that may be to be targeted as priority areas for future redevelopment or that are otherwise especially suitable for future adaptive reuse
• To propose redevelopment and design concepts for select identified properties, structures, and/or districts

**Final Deliverables/Work Products to City of Cleveland**

• Redevelopment Inventory and Analysis – Across region, city, and site scales as determined appropriate, students will research regulatory, economic, social, and environmental systems determined to be relevant to brownfield remediation and redevelopment of the identified properties. Findings will be presented in a graphic format with supporting narrative.
• Site Identification and Selection Study – Based on completed inventory and analysis, students will identify sites appropriate for redevelopment and/or adaptive reuse. In cooperation with City staff, strategic sites among those identified will be selected for further planning and design study
• Programming and Precedent Studies – Students will develop programmatic proposals for their selected sites and prepare case studies of built precedents related to their proposals
• Redevelopment Vision Plans – Students working individually or in small groups will prepare conceptual redevelopment proposals, and when appropriate, brownfield remediation plans for strategically identified and selected sites/districts in the City of Cleveland. The 90 acre Whirlpool site and surrounding area will be the primary focus of the class’ design study for which multiple proposals will be prepared, though additional sites/districts elsewhere in the city may also be identified for design and planning study. Contemporary strategies in sustainable urban design shall be emphasized. Proposals will focus on strategic programming and the planning/design of the physical environment, including building massing, infrastructure, and landscape elements. Concepts will be communicated graphically using methods such as
diagrams, plans, sections, and illustrative perspectives as determined appropriate, as well as supporting narrative. The phased deployment of proposed remediation and redevelopment strategies will be explored through phasing studies for each project.

**City of Cleveland Responsibilities**

- To work cooperatively with students and faculty to develop a shared understanding of key opportunities and challenges, as well as existing initiatives/research related to brownfield remediation and redevelopment across relevant scales
- To work cooperatively with students and faculty to establish criteria identify sites within the City of Cleveland appropriate for redevelopment and/or adaptive reuse
- To work cooperatively with students and faculty to select from among the identified eligible redevelopment sites/districts those that will be subjects of further planning and design study
- To provide technical assistance and data in a timely fashion, including but not limited to available planning documents, maps, and studies, determined relevant and necessary to completing the scope of work
- To identify relevant City staff, internal/external partners, and other project stakeholders
- To convene City staff, internal/external partners, and other project stakeholders in a timely fashion to review and/or provide project input as determined necessary
- To foster an positive working environment through which educational and project objectives can be achieved

**Courses Represented**

- LAR Design Studio III, LAR 553, Brad Collett, Fall 2014

**Timeline, Major Milestones or Tasks**

- August - Project kickoff meeting and site visit in Cleveland, staff to meet with students and faculty to introduce project and offer orientation to the City, context for project, and project objectives
- September – Students and faculty return to City on an as-needed basis for inventory and analysis research, data gathering, and interactions with partners and stakeholders. Students shall present their assessment to the City.
- October – An emphasis is placed on completing the site selection study, programming, and precedent research. Site selection findings and precedents will be presented to the City, and subject sites for design and planning study are finalized by mid-month. Planning and design studies for selected sites begins
- November – Planning and design studies are completed. Students present planning and design progress to the City
- December – Final presentations are made to the City

**Proposed Budget**
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Downtown Seasonal Ice Skating Rink

Scope of Work for Project 13

Terms and Conditions as per Agreement between the City of Cleveland, a Municipal Corporation of the State of Tennessee, and the State of Tennessee Acting by and through the State Board of Education on Behalf of the University of Tennessee.

City of Cleveland Project Lead
Sharon Marr, Mainstreet Cleveland, Executive Director, 423-479-1000/423-593-3098, mainstreet@clevelandtn.gov

City of Cleveland Alternate Project Contact
Greg Thomas, Planning Director/MPO Coordinator, office 423-479-1913, gthomas@clevelandtn.gov

UT SCI Project Lead
Benjamin Compton, Lecturer – University of Tennessee, 865-974-1693, bcompton@utk.edu

Project Overview

Purpose of Project

• Determine the feasibility of a temporary ice skating rink in downtown Cleveland
• Determine if the ice skating rink will create more activity in downtown and draw customers into the area for retailers and restaurants.
• Determine the best model for providing the temporary ice skating rink, including site requirements, alternative technologies, and business and operating characteristics.

Desired Outcomes/Project Objectives

City of Cleveland

• The City will be able to make an informed decision regarding the cost/benefits that a temporary ice skating rink will offer to the community and downtown business owners while determining the market for the rink, e.g. Lee University students, tourists, etc.

University of Tennessee
Final Deliverables/Work Products to City of Cleveland

- Students will assess the market for the temporary ice skating rink in downtown Cleveland, including implications for the skating rink size (capacity) and period of operation (e.g. December-March?)
- Students will evaluate alternative technologies (real and synthetic ice) and the requirements for installation, operation, and site-restoration.
- Students will evaluate site requirements for a temporary ice skating rink with the appropriate capacity (size, site preparation, utilities availability, parking, etc.)
- Students will evaluate the First Street Square site and possible nearby alternative sites relative to the desired site characteristics and the positive and negative impacts of the temporary ice skating rink on the site and its surroundings, including neighborhoods and businesses.
- Students will assess the predicted economic impact of the ice skating rink, considering any alternative locations near downtown, in terms of additional wages and sales for current nearby businesses versus the costs to develop and operate the temporary ice skating rink, including opportunity costs of alternative uses (e.g. lost parking at First Street Square).

City of Cleveland Responsibilities

- Provide data and support for the students.
- Provide contact information for businesses and stakeholders
- Provide any drawings, maps, technical information of the area

University of Tennessee Responsibilities

- Develop coursework to support project deliverables and desired outcomes
- Communicate with Mainstreet Cleveland staff throughout the project
- Facilitate at least one field trip for the course to Cleveland, TN
- Develop draft and final report to be delivered to the City of Cleveland

Courses Represented

- Economics 471 – Public Finance: Expenditure Analysis – Fall 2014 Instructor: Benjamin Compton

Timeline, Major Milestones or Tasks

- August/Early September – Representatives to visit course and introduce project to students
- September – Students are assigned responsibilities for project
- October – December – students work on project in consultation with Mainstreet Cleveland contacts
- Spring Semester – deliver the final report

Proposed Budget
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Project Overview

Purpose of Project

- Analyze the benefits of living in Cleveland, Tennessee with particular consideration on four interconnected development sectors: energy, environment, mobility, and communication.
- Identify strengths to build upon and weaknesses to address in relation to energy, environment, mobility, and communication development within the city of Cleveland.
- Consider how a focus on one of the four sectors can improve the others, and analyze best future practices to improve energy, environment, mobility, and communication simultaneously.
- Make a plan for Cleveland with these four in mind that will focus on what Cleveland aspires to be and considers how Cleveland’s momentum in one direction will benefit energy, environment, mobility, and communication development goals.

Desired Outcomes/Project Objectives

City of Cleveland

- A written report detailing measured impacts of Cleveland’s current and potential future plans that also details best practices for Cleveland to improve energy, environment, mobility, and
communication within the city. Identification of strengths and weaknesses in relation to energy, environment, mobility, and communication development, as well as potential paths to take to build upon strengths and address weaknesses.

**University of Tennessee**

- Gain an understanding of real-world situations at the urban scale and apply methodologies to consider the potential for improvements in energy, environment, mobility, and communication that will appeal to the citizenry of Cleveland. Understand how research methods can be utilized in coordination with local governments and learn how to work with stakeholders, partners, and decision-makers. Apply diverse research applications to new and different problems at the urban scale.

**Final Deliverables/Work Products to City of Cleveland**

- Final report highlighting the measured potential to improve energy, environment, mobility, and communication across Cleveland while achieving development goals that fit within Cleveland’s current development trajectory.

**City of Cleveland Responsibilities**

- Provide past planning reports.
- Provide stakeholders for a site visit to Cleveland tentatively set for March 30th.
- Provide comments and reviewers for the first draft of the final report.

**University of Tennessee SCI Responsibilities**

- Investigate Cleveland’s past planning efforts and current development trajectory.
- Consider stakeholder views, community visions, and apply them to an energy, environment, mobility, and communication development matrix. Specifically consider what steps and/or efforts will encourage citizens to make decisions that support urban-living.
- Identify keys to optimize development for Cleveland within the energy, environment, mobility, and communication sectors. Measure potential for improvements across the development matrix.
- Produce a final report that highlights Cleveland’s measured potential to improve energy, environment, mobility, and communication while achieving development goals that fit within the current development trajectory and citizen outlook in Cleveland.

**Courses Represented**

- Energy Science and Engineering 697: Big Data for Energy Analysis

**Timeline, Major Milestones or Tasks**

- 52
- January 12th: ESE 697 begins.
- February 9th: Greg Thomas guest lectures, and answers student’s questions and concerns.
- March 30th: Students visit Cleveland to discuss future plans and receive stakeholder input.
- April 20th: Rough draft of final report is sent to Greg and stakeholders for comments/reviews.
- July 1st: Final report is sent to Cleveland and SCI coordinators.

Dates are approximate, and are subject to change.

Proposed Budget

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September 3, 2014

University of Tennessee, Knoxville
Sponsored Projects Accounting Office

RE: UTK and City of Cleveland Smart Communities Initiative (SCI) Partnership—proposed waiver of Facilities and Administrative Costs

Dear UTK Sponsored Projects Accounting Office:

The City of Cleveland is grateful for the opportunity to partner with the University of Tennessee, Knoxville in the pilot year of the Smart Communities Initiative (SCI). The City has reserved $92,000 to cover UTK project costs that were identified as the individual service learning projects were developed. In addition, local staff hours contributed to the project will likely range from 50 to 100 hours per week over the course of the SCI work, with time devoted to working cooperatively with faculty and students to provide the service learning experience in the SCI context.

In view of the heavy investment of City resources in the SCI Partnership and the mutual desire to stretch those limited resources to sustain service learning experiences for the largest possible number of students across as many disciplines as possible while meeting real needs within our community, the City of Cleveland respectfully requests that the Facilities and Administrative costs be waived. It is our understanding that these costs typically range from 15% to 40% of project costs and they simply cannot be accommodated within the budget. Thank you for considering our request.

Sincerely,

Greg Thomas, AICP
Planning Director