



Memorandum Department of Planning & Development Services

To: Michael O. Geisel, City Administrator
From: Justin Wyse, Director of Planning and Development Services
Date: August 23, 2018
RE: Comprehensive Plan and Travel Demand Model Update

*Forward to PPD
for review & consideration
moy 8/16/2018*

BACKGROUND

Earlier this year, City Council approved a transfer of \$300,000 to fund an update to the City's Comprehensive Plan and Travel Demand Model. Following approval by City Council, a Request for Qualifications was issued for a planning consultant to perform the update to the plan, submittals were received, interviews conducted, a preferred consultant was selected, and a scope of services has been negotiated. Additionally, Staff presented a recommendation that the contract for the update to the travel demand model be negotiated with George Butler Associates (GBA), as the firm created and has updated the model since 2001, resulting in the firm being uniquely qualified to perform the update.

COMPREHENSIVE PLAN

In reviewing proposals for the planning consultant, an interview team was assembled that included:

- Mayor;
- Planning Commission Chair;
- Director of Planning and Development Services;
- Director of Public Works;
- Director of Parks, Recreation, and Art; and
- Asst. City Planner.

Each of the interview members selected the same firm, Town Planning and Urban Design Collaborative (TPUDC) as the top rated firm to complete Chesterfield's project and negotiations began.

Travel Demand Model

While working through the RFQ process for the Comprehensive Plan, a detailed scope of services for the update to the City's travel demand model began. Additionally, Staff has been working on the initial steps of reviewing and creating the land use input tables to be utilized in the update and calibration of the model. This process entails a detailed review of existing traffic analysis zones (TAZ), updating TAZ boundaries to correct any errors and account for development changes, and review of each parcel of land within the City to create a detailed summary of land uses able to be aggregated at various scales for the purpose of future calibration efforts. While not yet complete, significant progress has been made in this effort.

BUDGET IMPLICATIONS

As discussed when the funds were transferred for the project, Staff estimated the two projects would cost \$300,000. After detailed negotiations, the proposed contracts are:

Comprehensive Plan - \$210,905

Travel Demand Model - \$123,302

Total - \$334,207

As is typical with many projects of this magnitude, I recommend that a contingency amount be approved by City Council allowing additional project costs to be accommodated through the process without delay. Examples of this may include additional expenses related to public meetings or additional work product not contemplated within the scope of services. The contingency represents less than 5% of the total project costs. While every attempt is always made to not utilize the contingency funds, it is critical in allowing the process to continue smoothly and without delay should unexpected items arise.

RECOMMENDATION

I recommend that the request to update the Comprehensive Plan and Travel Demand Model be forwarded to the Planning and Public Works Committee for consideration of a budget amendment to fund the effort to update the Comprehensive Plan and Travel Demand Model.

Three actions are necessary from the Planning and Public Works Committee:

1. A recommendation to City Council to transfer an additional \$50,000 to fully fund the projects;
2. A recommendation to City Council to approve the contract with Town Planning and Urban Design Collaborative (TPUDC) for the update to the City's Comprehensive Plan.
3. A recommendation to City Council to approve the contract with George Butler Associates (GBA) for the update to the City's Travel Demand Model.

Attachments: Comprehensive Plan Scope of Services
 Travel Demand Model Scope of Services

COMPREHENSIVE PLAN

FOR THE

CITY OF CHESTERFIELD, MISSOURI



AUGUST 2, 2018

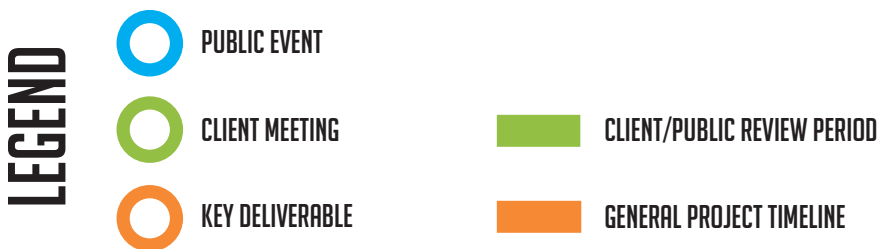
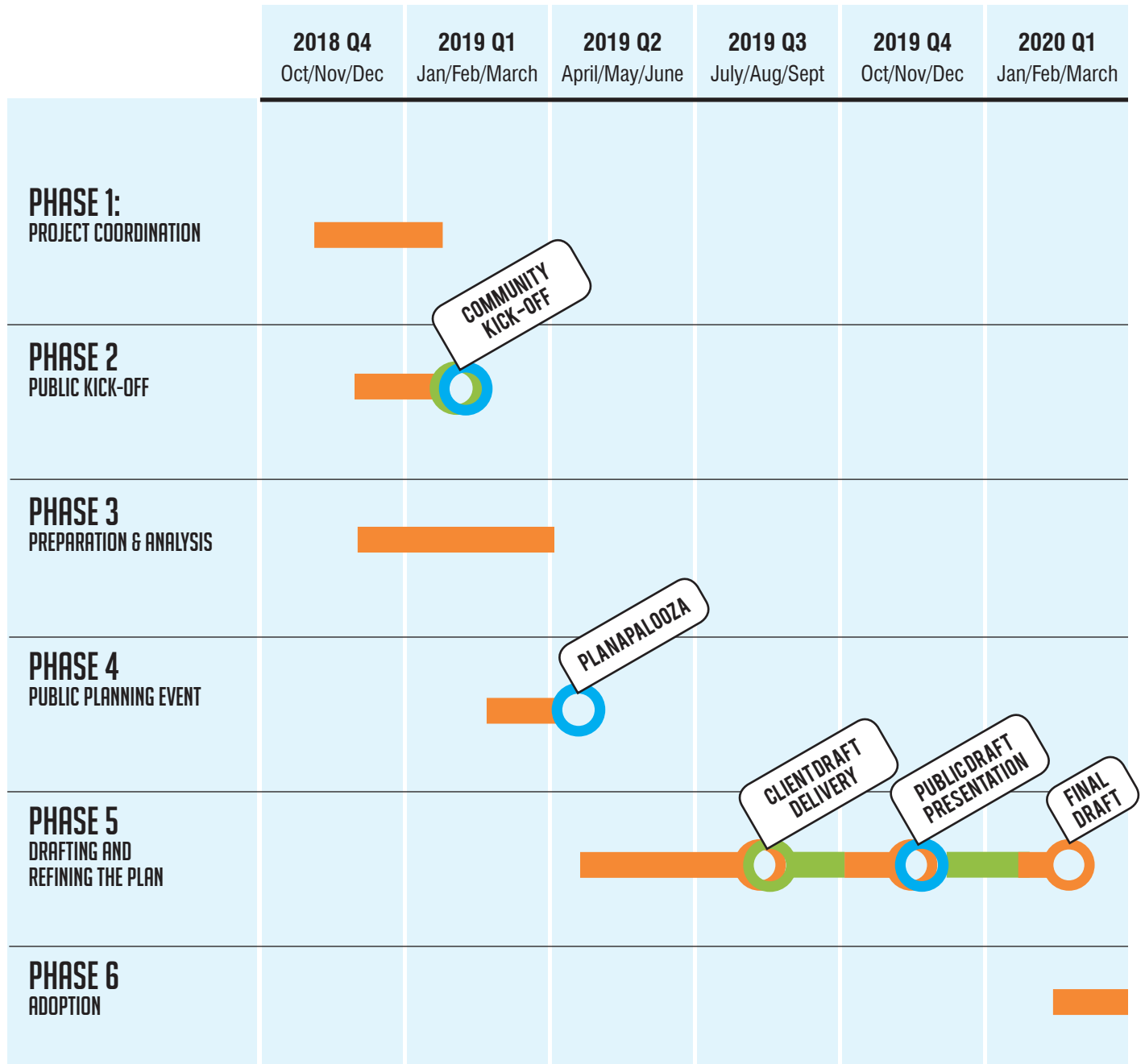
PROPOSED PROJECT SCOPE AND BUDGET

Submitted by:



PROJECT APPROACH | PROPOSED TIMELINE

The TPUDC Team presents the following proposed timeline based on the project approach described in the Statement of Qualifications, and our typical comprehensive plan process. We anticipate that this project will be completed in the first quarter of 2020.



PROJECT SCOPE

TPUDC proposes the following Phases and Tasks for the completion of a successful comprehensive planning process.

PHASE 1.0: PROJECT COORDINATION

TASK 1.1: PROJECT MANAGEMENT

Throughout the project, coordination between the City and the Project Team will occur as a set of milestones pertaining to public outreach, preliminary findings, work on the Comprehensive Plan, ongoing issues, and feedback on draft materials. TPUDC will be working directly with the City staff as a single integrated Team. We understand the importance of maintaining an open line of communication between the consultant and staff. TPUDC's Project Manager will work closely with City of Chesterfield Staff and the Project Team to coordinate all milestones and tasks. TPUDC will establish and facilitate regular on-site meetings and calls with key Staff to review progress and assess needs as they arise.

TASK 1.2: CLIENT KICK-OFF MEETING

We have found that Comprehensive Planning processes are most effective when clear objectives are established up front. We will kick-start the process with a goal-setting work session with City staff to identify and confirm overarching goals for the Comprehensive Plan.

This meeting will cover a multitude of topics such as:

- Clarification and creation of Client/Team interface and collaborative structure
- Goals based on the Client's perspective
- Discussion of local initiatives
- Initial assessment of available and missing data
- Establishment of measures of success
- Discussion of public outreach objectives and strategy
- Procedures for sharing of information

TASK 1.3: PROJECT MANAGEMENT PLAN

After the Kick-off Meeting, Staff and the TPUDC team will establish a set of project milestones and further refine the Work Plan and project Schedule set forth in this Proposal. TPUDC will create a Project Management Plan that identifies the roles of all project Staff and participants and sets out in detail the refined Work Plan and project schedule, including all Tasks, Sub-tasks, and major milestones.

TASK 1.4: INTERDEPARTMENTAL MEETING

TPUDC finds it beneficial to bring all of the relevant departments together at the very beginning of the project to jump start the collaborative process. This will serve to ease the review and adoption process and ensure that all departments are working as a cohesive team moving toward the same goal: the creation of a progressive Comprehensive Plan that the City is not only comfortable with but excited about. Those in attendance at this meeting should be individuals that will be directly involved in the creation of the Comprehensive Plan, and may include (but are not limited to): Finance, Police, Public Works, Information Technology (includes our GIS folks), Planning and Development Services and Parks, Recreations, and Arts.

TASK 1.5: COMMUNITY OUTREACH AND ENGAGEMENT PLAN

Few issues are as crucial to a project as initiating and maintaining meaningful public involvement throughout the life of a project. The Team will work closely with City Staff on a Community Outreach and Engagement Plan, which will include:

- Toolkit elements for Building Awareness and Gathering Input will be tailored to the needs of the project;
- Identification of stakeholders and timing of meetings associated with public outreach and collaboration;
- Methods and materials anticipated for use throughout the public outreach effort and for each audience;
- Strategy for use of print and broadcast media for public meeting announcements and provision of information.

We look forward to developing creative and innovative community engagement solutions that will be specifically tailored to Chesterfield, its residents and culture. The team will work hand-in-hand with the City on outreach.

PHASE 2.0: PUBLIC KICK-OFF

TASK 2.1: SITE RECONNAISSANCE & TOUR OF THE CITY

Following the Kick-Off Meeting, TPUDC will conduct the first reconnaissance tour of Chesterfield with City staff as our guide. This task provides an opportunity to discuss and review location-specific opportunities and constraints and to familiarize ourselves with the study area.

TASK 2.2: POLICY-MAKER INTERVIEWS

We understand that the City Planning Commission serves as the formal body in Chesterfield to approve the Comprehensive Plan, and that they will be involved in the project throughout the planning process. Chesterfield's elected officials are representatives of the at-large community, and are one of the best windows through which to "see" the City. By conducting individual interviews with each member of both the Planning Commission and the City Council, they will have the opportunity to share hopes and concerns about this project/process, as well as specific insights into what areas of the City need the most improvement. Through policy-maker interviews, we will begin to identify any potential barriers to overcome during the planning process.

The interviews will help the Team prepare for the Community Kick-Off meeting by drawing awareness to topics of interest and potential "hot button" issues in Chesterfield.

X TASK 2.3: PROJECT BRANDING

Branding for the project will be developed at the beginning of Phase 1 working in collaboration with City Staff. We know from past experiences that creative project branding helps draw interest to the project. We will work with the City to either tie into existing branding or to introduce something new that will build excitement.

TASK 2.4: ONLINE ENGAGEMENT

A web platform will be developed using Engagement HQ to provide meaningful online stakeholder engagement. This will be used to complement the in-person events before, during and after the Planapalooza™.

TASK 2.5: PRINT, SOCIAL MEDIA & MEDIA CAMPAIGNS

TPUDC will work in conjunction with City Staff to initiate the social media campaign using the tools agreed upon and identified during the completion of the Outreach & Engagement Plan. This first round of media outreach will be used to bring awareness of the project and build excitement. Similar to the media campaigns, printed materials will also be developed to make a first connection with stakeholders that do not have an online presence.

TASK 2.6: COMMUNITY KICK-OFF

A public kick-off event will serve as the official start of the process for the general public. It will be used primarily to get people excited about the Comprehensive Plan, provide an overview of the process, begin to generate and share ideas for a long-term vision, and answer any questions. We look forward to collaborating with City staff to craft a fun, engaging, and productive kick-off event, which should be attended by policy-makers, stakeholders, and citizens.



TPUDC Community Event.

PHASE 3.0: PREPARATION & ANALYSIS

TASK 3.1: REVIEW BACKGROUND DOCUMENTS

To meet the goals of the project, the TPUDC Team will inventory and evaluate physical data, plans, programs, and policies that could influence the development of the Comprehensive Plan.

Current and completed planning documents and studies pertaining to Chesterfield and the region will be provided by the City for the Consultant's review to ensure that the Team's work builds upon existing knowledge. TPUDC will review the following documents to assess relevance, particularly of the older studies, and evaluate progress on the recommendations made.

- 2009 Comprehensive Plan Update
- Chesterfield Valley Stormwater Master Plan
- Chesterfield Bikeable Walkable Community Plan
- Travel Demand Model
- Parks, Recreation & Arts Comprehensive Master Plan
- Any other relevant plans and studies

TASK 3.2: EXISTING CONDITIONS ANALYSIS

The Team will begin gathering pertinent information related to demographics, local and regional policies, existing businesses and industry, housing and neighborhoods, natural and environmental features, transportation and utility infrastructure, land use and urban form, historic and cultural assets and public facilities. As Team members begin compiling relevant data, Tripp Muldrow will start work on a market assessment. The market assessment is designed to provide the City with a better knowledge of what kinds of additional retail, residential, and other use types are suitable for expansion; and to give policy direction in regards to enhancing the economic health of the community while preserving quality of life. Concurrently, Toole Design Group will begin analyzing the multi-modal transportation system, Travel Demand Model, and any current and planned streetscape improvement projects.

TASK 3.3: BASE MAPS

TPUDC will work with the City to prepare base mapping for use during community engagement sessions and as the base for any design work. Base maps will include layers such as environmental constraints identified on local and State databases, as well as parcel lines, existing buildings, historic properties, roads, and other pertinent data layers that will be needed by the Team. The City will be responsible for providing all relevant GIS data, and all mapping work will be done in GIS.

PHASE 4.0: PUBLIC PLANNING EVENT



TASK 4.1: PRINT, SOCIAL MEDIA & MEDIA CAMPAIGNS

The print and media campaign will continue during Phase 4.0, inviting all stakeholders to participate in the planning process and provide their input. TPUDC will work with the City to be sure that social media outlets are populated regularly with information on upcoming meetings as well as planning best practices in order to educate the citizens and develop a common language that everyone understands.



TASK 4.2: PLANAPALOOZA™

Though community engagement will occur over several months, TPUDC recommends that the bulk of planning-related discussions and decisions be compressed into a multi-day engagement in order to take advantage of the opportunity for direct collaboration and sharing of ideas between the Team, Client staff, stakeholders and the public.

TPUDC understands that the City of Chesterfield would like to conduct planning work through a robust public process, so that all residents can have a voice in the future of the City. Our Team shares this approach to planning and, in all our projects, performs planning work in public, setting up studio workspace within the heart of the study area to facilitate dialogue and personal interaction between the Team and the community. A central location will make it easy for the public to drop in and check on our progress, while giving our Team members the opportunity to immerse themselves in the City and experience its unique character.

TPUDC's unique advanced planning workshop process, the Planapalooza™, is an experience that typically includes a variety of TPUDC's more innovative and creative engagement tools. The process would allow Chesterfield citizens a forum to provide ideas and goals for the future of their City in a casual and accessible way, over events like scavenger hunts, bike rides, potlucks or other fun engagements.

The Planapalooza will provide a forum for the exchange of ideas, and offers the public the opportunity to provide "real-time" feedback to the Team. By seeing how our planners respond to public feedback and suggestion, those who participate in the process will begin to feel a sense of authorship over the Comprehensive Plan.

TPUDC recommends a 7-day Planapalooza™ for the Comprehensive Plan. The schedule will include multiple presentations, technical roundtable discussions, public input sessions and client meetings. There will be multiple

opportunities for the public to provide their ideas and feedback. The Planapalooza™ schedule will allow for the development of master plans for key areas and corridors in Chesterfield, specifically the Urban Core, Chesterfield Valley, the Old Chesterfield Road Historic District, and key corridors including I-64/US-40, Chesterfield Parkway, Clarkson Road/Olive Boulevard, and Chesterfield Airport Road. The Planapalooza will provide the public with an opportunity to comment on the development alternatives proposed for areas to be master planned, and will result in the creation of master plans and three-dimensional renderings to inspire the community.

Crafting any public process requires a thorough conversation with the local leadership. Therefore, we expect the approach will need to be customized further with the City.

TASK 4.2.1: PUBLIC OPENING PRESENTATION

On the first evening, TPUDC will deliver an introductory presentation on planning best practices, describe innovative planning and economic development tools related to topics relevant to Chesterfield, and outline the process moving forward. This meeting will also provide an opportunity for the public to ask questions.

TASK 4.2.2: HANDS-ON CITIZEN WORKSHOP

Following the presentation, the Team will facilitate a hands-on workshop where the public will be invited to contribute their ideas, working over base maps of the City to identify how they might like to see the area evolve in the future, what areas of the City they like and don't like, and any other concerns or ideas they may have relating to the future Comprehensive Plan. This intensive process will provide a preliminary inventory and assessment of issues and opportunities based on the concerns of the public, stakeholders, Planning Commissioners and City Council members who participate in this workshop.

We expect that this meeting will be open to all stakeholders interested in the future of growth and development of Chesterfield. We suggest that this public workshop be held in a location where the community feels comfortable and a general sense of invitation.



Public Workshop led by TPUDC.

TASK 4.2.3: STUDY AREA/PRECEDENT TOUR

During the first day of the Planapalooza™, the Team will tour the study area with staff as our guide. This will give our planners and subconsultants the opportunity to visit areas identified as needing more study during the Citizen Workshop and to gain a better understanding of Chesterfield's development patterns, neighborhood character, transportation network, land uses, topography, environmental constraints, and development opportunities. We will collect information through photographs, maps and measurements if necessary.



TASK 4.2.4: TECHNICAL MEETINGS

During the first two days of the Planapalooza™, formal and informal meetings will be held with various approving agencies and stakeholder groups. Topics will relate to the issues identified in the RFP, including multimodal transportation and connectivity; future land uses; infrastructure; open spaces; wayfinding; community design; historic and cultural assets; and any other critical topics determined in partnership with staff. The input gathered from these meetings will build on the inventory and assessment of issues and opportunities in Chesterfield and help inform and refine the Team's recommendations for the Comprehensive Plan.



TASK 4.2.5: OPEN STUDIO

Over the entire course of the Planapalooza™, the TPUDC Team and participating staff will be set up in a space centrally located within the study area, such as a first-floor vacant storefront or municipal building. Any citizen, business owner or public official who wishes to join in and provide comments, suggestions, or simply watch us

work, will be able to stop by at their own convenience. Our Team members are available to engage with the community, ask questions and accept feedback and ideas.

TASK 4.2.6: PLANNING & ILLUSTRATING

Throughout the Planapalooza™, our planning and urban design team will work with the citizens of Chesterfield to refine the vision for future development and to create conceptual plans and illustrations of key areas and corridors.

To convey conceptual ideas efficiently and effectively, TPUDC utilizes the three-dimensional drawing talents of Depiction. During the Planapalooza™, Depiction co-owner JJ Zanetta will produce full-color renderings, combining birds-eye, aerial and perspective views illustrating the potential future of specific study areas identified during the Planapalooza™.

TASK 4.2.7: PIN-UP & REVIEW

Mid-way through the Planapalooza™, the Team will conduct an interim pin-up and review session to present master planning ideas and design parameters for future growth and development in Chesterfield, based on critical analysis of the issues at hand and the input of community participants. This is an important meeting for checking in with the public to make sure the specific plan vision is on the right track.

TASK 4.2.8: WORK-IN PROGRESS PRESENTATION

On the final evening of the Planapalooza™, TPUDC will give a presentation that describes the progress to date, explains the elements of the Comprehensive Plan, and presents other findings and products developed during the Planapalooza™. This is another opportunity for the public to provide feedback and shape the direction of vision.

TASK 4.3: CLIENT MEETING

Following the closing presentation, TPUDC will meet with the Client to debrief on the Planapalooza™, receive additional feedback on the vision, and reconfirm the schedule for the next phases of work. By this time, TPUDC will have worked closely with staff to confirm an outline for the Comprehensive Plan document. TPUDC will also coordinate with the City to develop a schedule for production, review of the plan components, and meetings between the City and Team.

TASK 4.4: PLANNING & VISIONING BOOK

Based on the work accomplished during the Planapalooza™ and feedback from stakeholders, TPUDC will prepare a Planning and Visioning Book containing annotated versions of the plans and renderings created. The illustrations in the book will be a valuable resource during the adoption phase, allowing citizens and decision makers to envision the future made possible by the recommendations in the Comprehensive Plan.

PHASE 5.0: CLIENT DRAFT COMPREHENSIVE PLAN

TASK 5.1: TARGETED ANALYSIS OF EXISTING CONDITIONS

Following the Planapalooza™, the Team will undertake a more targeted analysis of existing conditions related to specific issues and future goals identified by the community during the Planapalooza™. This will allow us to focus on the most important information and do a more in-depth evaluation.

Our transportation consultant, Toole Design Group, will work with TPUDC to gather any remaining and necessary transportation data/information needed for preparation of the Comprehensive Plan. They will coordinate with the City's traffic consultant responsible for the Travel Demand Model to ensure integration of the land use and transportation elements of the Comprehensive Plan. TDG will review the Chesterfield Bikeable Walkable Community Plan and use their expertise in multi-modal transportation to incorporate that plan's recommendations into the Comprehensive Plan, while identifying any additional implementation strategies to achieve the City's transportation goals. In addition, they will work with the team to study Chesterfield's key corridors and provide recommendations to ensure they remain efficient and attractive routes through the City and gateways to the City.

Concurrently, our economic development specialist Tripp Muldrow will study changes in industry trends, development activity, and demographic shifts that affect the City's vision for the future. He will then help find and recommend creative ways that both existing and future businesses can capitalize on existing opportunities, and will help the team formulate strategies that will inform the implementation recommendations.

From these targeted studies, the Team will identify key insights and develop recommendations and strategies that will inform the creation of the Client Draft Comprehensive Plan. Data will be folded into the Plan using infographics and clear language that is easily digestible and understood by the public.

TASK 5.2: CLIENT DRAFT COMPREHENSIVE PLAN

Following the Planapalooza™, TPUDC will refine the Comprehensive Plan outline and plan elements based on feedback from City staff and stakeholders.

The Team will assemble one clear Draft Comprehensive Plan document. The highly graphical, reader-friendly document will include policy recommendations and other critical

action items to accomplish the goals of the plan. The Draft Comprehensive Plan will be a Client version, on which the City will provide feedback and revisions to be made before a Public Draft is distributed community-wide.

TPUDC's approach to Comprehensive Plan document organization is to create two major sections. The first will provide an introduction and a summary of the public process, along with a graphical description (maps and infographics) depicting the existing conditions, historical trends, and current observations. This section will provide enough background information to provide a framework into which the second part of the document will build. The second part will emphasize the future of Chesterfield, including a collection of strategic transformations to and a user-friendly toolkit for implementation. The Comprehensive Plan will include illustrative plans and renderings for strategic areas identified during the Planapalooza™. While we've found this to be the most effective method of organization, we will work with the City to create a document that meets your needs.

The Client Draft Comprehensive Plan will include the following:

5.2.1: VISION & THEMES: The Plan will include a vision statement and guiding principles that build on the previous Planning Principles articulated in the existing Comprehensive Plan, community and regional efforts and represent the collective community's desired future for Chesterfield in terms of future land use, transportation, economy, infrastructure, preservation and growth.

5.2.2: PUBLIC PROCESS: The Plan will include a summary of the public outreach and engagement process. The summary will indicate how information gathered during the public process was used to guide the plan's vision statement, analyses, policies and strategies.

5.2.3: COMMUNITY PROFILE: We will work with the City to create infographics to present the Chesterfield Profile, providing the City with a graphically interesting snapshot of current demographics, population, economic, land use, transportation, and housing data.

5.2.4: CONSERVATION AND GROWTH MAP: Traditionally referred to as a Future Land Use Map, our approach creates a Conservation and Growth Map, which focuses on community character rather than "use" as the defining organizational feature of different parts of the community. The Map will identify growth centers and specific activity nodes, transitional areas, rural areas, and critical resource areas. It will be generated based on the preferred scenario, using GIS information and community stakeholder

PROJECT SCOPE

input. Permanently protected land and areas for future conservation will provide a framework for the plan, with designated areas for targeted investment in centers and along critical corridors. These areas will provide a focal point for goals, policy and strategy decisions. Opportunities for infill, suburban retrofit, redevelopment, and transition areas will be differentiated, as well as residential, institutional, commercial, or industrial growth areas that don't fit within the conservation and growth framework.

The Team will develop illustrative plans to clearly communicate desired future development scenarios and generate a growth and conservation map that reflects the goals and aspirations of the community. As a part of this task, we will identify the unique character areas within the City and provide specific illustrative plans and three-dimensional renderings of activity nodes and growth areas. We will focus on providing tools to guide development with an emphasis on walkability, connectivity, and character.



Recent TPUDC Downtown Rendering.

- **5.2.5: PLAN ELEMENTS:** The plan will contain analysis, existing conditions, policies and strategies for various Comprehensive Plan elements, which will be defined during the planning process. The plan can be organized in various ways and that final outline will include elements required by the City Code and those determined by the Team based on the input and feedback received. The following elements will likely be included in the plan:
 - Economic Development;
 - Housing & Neighborhoods;
 - Natural Resources, Open Space and Recreation;
 - Historic and Cultural Resources;
 - Community Service, Facilities and Amenities;
 - Transportation and Parking; and
 - Community & Urban Design

We look forward to refining the plan outline with the City.

TASK 5.2.6: PLAN IMPLEMENTATION: Implementation will be a key theme throughout the Comprehensive Plan document. As part of each element, TPUDC will provide specific strategies for implementation and identify the responsible party and recommended timing for each. At the end of the Plan, a prioritized action plan summary will provide all of the recommendations in a single user-friendly “playbook.”

TASK 5.3: SUBMIT CLIENT DRAFT COMPREHENSIVE PLAN

The Team will submit to the City a draft Comprehensive Plan for Client review only. After receiving the Client Draft, City staff will have an opportunity to provide feedback and request changes that will be made before a draft goes out to the public. This step of the project is the Client Review Period. At the end of this period, the City will provide one consolidated set of comments that will be integrated into the document.

PHASE 6.0: PUBLIC DRAFT COMPREHENSIVE PLAN



TASK 6.1: PRINT, SOCIAL MEDIA & MEDIA CAMPAIGNS

The media campaign will continue during Phase 6.0, inviting all stakeholders to review the Public Draft Comprehensive Plan and provide their feedback, ensuring that the plan content reflects what the community has shared with the Team during the process.

TASK 6.2: PUBLIC DRAFT COMPREHENSIVE PLAN

TPUDC will address any comments received from the Client Draft Comprehensive Plan and make revisions to the document which will then become the Public Draft Comprehensive Plan. TPUDC will submit to the Client a Public Draft which the Client will circulate to stakeholders, City Council, Planning Commission, and the general public. Thus will begin the Public Review Period.

TASK 6.3: CLIENT MEETING

Prior to the distribution of the Public Draft Comprehensive Plan, TPUDC will return to Chesterfield. We will meet with the Client to discuss the implementation playbook, and discuss any other critical path items for completing and maintaining support for the Comprehensive Plan.



TASK 6.4 COMMUNITY OPEN HOUSE

During this trip, TPUDC will also hold a one-day community open house to review the plan with the community.

Upon closing of the comment period, the Client should organize and reconcile all feedback and edits and submit one clear set of revisions to TPUDC for inclusion into the Final Comprehensive Plan.

PHASE 7.0: FINAL COMPREHENSIVE PLAN & ADOPTION

TASK 7.1: FINAL COMPREHENSIVE PLAN

The Team will incorporate all remaining edits from the Public and submit the Final Comprehensive Plan ready for the official approval process.

TASK 7.2: PLAN ADOPTION

TPUDC has found that the most successful adoption processes are lead by City Staff. We can support the adoption of the Comprehensive Plan by creating audience-specific presentations and consulting and strategizing with staff. TPUDC may attend meeting with and make formal presentations of the Comprehensive Plan to the City of Chesterfield Planning Commission and the City Council. At those meetings, staff will collect comments, questions, and suggestions for refinements to the Comprehensive Plan and consolidate them into a series of action items for revision or response. TPUDC will make these revisions as necessary.

TASK 7.3: CLIENT MEETING

TPUDC will meet with the Client one last time to discuss the project and close out the process. TPUDC will provide the "As Adopted" version of the Comprehensive Plan and all GIS files in the format specified by the Client.

PROJECT BUDGET

The TPUDC Team presents the following Project Budget based on the Project Scope. The total proposed project cost, inclusive of supplies and expenses, is \$210,905.

	TASK HRS	Subtask Total	Task Total
PHASE 1.0: PROJECT COORDINATION			
TASK 1.1: Project Management	48	\$6,480	
TASK 1.2: Client Kick -Off Meeting	6	\$1,000	
TASK 1.3: Project Management Plan			
TASK 1.4: Interdepartmental Meeting	4	\$700	
TASK 1.5: Community Outreach & Engagement Plan	4	\$600	
PHASE 2.0: PUBLIC KICK-OFF			
TASK 2.1: Site Reconnaissance & Tour of Town	4	\$700	
TASK 2.2: Policymaker Interviews	16	\$2,800	
TASK 2.3: Project Branding	20	\$2,240	
TASK 2.4: Online Engagement	24	\$3,600	
TASK 2.5: Print, Social Media and Media Campaigns	12	\$1,320	
TASK 2.6: Community Kick-Off	16	\$2,800	\$22,240
PHASE 3.0: PREPARATION & ANALYSIS			
TASK 3.1: Review Background Documents	46	\$6,720	
TASK 3.2: Existing Conditions Analysis	60	\$9,120	
TASK 3.3: Base Maps	8	\$1,200	\$17,040
PHASE 4.0: PUBLIC PLANNING EVENT			
TASK 4.1: Print, Social Media and Media Campaigns	12	\$1,320	
TASK 4.2: Planapalooza (Task 4.2.1 - Task 4.2.8)	535	\$75,750	
TASK 4.3: Client Meeting	6	\$1,000	
TASK 4.4: Planning & Visioning Book	24	\$2,640	\$80,710
PHASE 5.0: CLIENT DRAFT COMPREHENSIVE PLAN			
TASK 5.1: Targeted Analysis of Existing Conditions	44	\$6,320	
TASK 5.2: Client Draft Comprehensive Plan	32	\$2,880	
TASK 5.2.1: Vision & Themes	10	\$1,600	
TASK 5.2.2: Public Process	8	\$1,200	
TASK 5.2.3: Community Profile	16	\$2,400	
TASK 5.2.4: Conservation & Growth Map	18	\$2,800	
TASK 5.2.5: Plan Elements	236	\$34,560	
TASK 5.2.6: Plan Implementation	54	\$7,920	
TASK 5.3: Submit Client Draft Comprehensive Plan	6	\$1,000	\$60,680
PHASE 6.0: PUBLIC DRAFT COMPREHENSIVE PLAN			
TASK 6.1: Print, Social Media and Media Campaigns	12	\$1,320	
TASK 6.2: Public Draft Comprehensive Plan	24	\$3,120	
TASK 6.3: Client Meeting	4	\$580	
TASK 6.4: Community Open House	20	\$2,920	
PHASE 7.0: PUBLIC DRAFT COMPREHENSIVE PLAN			
TASK 7.1: Final Comprehensive Plan	16	\$2,400	
TASK 6.2: Plan Adoption	16	\$2,400	
TASK 6.3: Client Meeting	0	\$0	\$12,740
TOTAL Hours	1353		
		\$193,410	\$193,410
		LABOR TOTAL	\$193,410
		EXPENSES:	\$17,495
		TOTAL FEE	\$210,905

EXHIBIT A

SCOPE OF WORK TRAFFIC ENGINEERING SERVICES TRAVEL DEMAND MODEL UPDATE

This scope of work includes six tasks of work including Model Update / Data Collection; Model Calibration; Near-term and Long-term Model Scenarios; Capacity Analyses; and Improvement Recommendations. The first three tasks would be included in the base agreement while the last three could be added to the contract as additional services if it is determined that they are required based upon the completed initial tasks.

BASIC SERVICES

TASK 1: MODEL UPDATE / DATA COLLECTION

- A. The ENGINEER and the CITY shall meet and update land use information.
 - 1. The ENGINEER will work with the CITY to derive / compute required land use information from East - West Gateway data files and from City land use master plans.
 - 2. It is understood that the CITY will provide EXCEL worksheets that list the current (Existing), approved and anticipated development expect to be completed within five years (Near Term Development) and Master Plan land use information (Long Term Development) by current Traffic Analysis Zone (TAZ).
 - 3. The CITY will also provide GIS shape files of the TAZ configurations.
- B. The ENGINEER along with the CITY will meet with representatives from both St. Louis County and Missouri Department of Transportation (MoDOT) to discuss model update and request additional input regarding future land use as well as future transportation network improvements. Any available traffic counts and traffic signal phasing and timing information will also be requested.
- C. The ENGINEER will modify the model link-node system to reflect the current TAZ boundaries and configurations provided by the CITY.
 - 1. The CITY will provide the ENGINEER with the current cross sections and traffic control information including traffic signal phasing and timing information for each thoroughfare link and major intersection.
 - 2. The ENGINEER will also update the zone connectors in the link-node system
- D. The ENGINEER will update the existing City traffic count database:
 - 1. The ENGINEER and the CITY will identify locations where Peak Hour counts should be taken. PM Peak Hour turning movement counts will be recorded between 4:00 PM and 7:00 PM on a typical weekday at thirty-nine (39) intersections, as listed in **Exhibit A1**, and will be utilized for the model calibration. The traffic counts will be conducted by Miovision at each intersection, using video technology. Manual counts at additional locations can be recorded for an increased fee.

2. The ENGINEER will update external zone information, including through trip tables, using external station counts, information from East-West Gateway models, fratar analyses and traffic counts provided by St. Louis County and MoDOT. Refinement of the external zone information would be completed during the calibration process.
- E. The ENGINEER will update the Project Modeling Workbook, including the detailed project records of all pertinent information such as sources of data, assumptions used, and calculations.
- F. The ENGINEER will create reproducible maps with the following information:
1. Input link and node location information using a coordinate system based on GIS mapping to be provided by the City.
 2. Maps at scales desired by the City indicating street alignments, street names, and other parameters as desired.
- G The ENGINEER will coordinate future roadway improvement needs and recommendations with consultant selected to develop the Transportation Master Plan.

TASK 2: MODEL CALIBRATION

- A. The ENGINEER will complete VISUM computer runs, with incremental adjustments, until simulated traffic volumes replicate existing PM peak hour link and node counts within acceptable variation as stipulated by NCHRP 716.
- B. The ENGINEER will update and maintain project records and documentation of the calibration procedures to keep the Project Modeling Workbook current.
- C. The ENGINEER will review model calibration with the Model Review Committee (MRC). In addition to CITY staff, the MRC could include representatives from St. Louis County and MoDOT. After approval from the MRC, the ENGINEER will proceed to TASK 3.

TASK 3: NEAR-TERM AND LONG-TERM MODEL SCENARIOS

- A. The ENGINEER, along with input from the CITY, will develop future PM peak hour models including:
1. A near-term projection period based on existing approved and anticipated development plans and planned near-term infrastructure improvements (i.e. 5 years).
 2. A long-term projection period based on the existing City Master Plan and the newly developed Transportation Master Plan.
 3. A modified long-term projection based on an adjustment of the land use densities and/or modification of the City Master Plan.
 4. Model runs will be completed for each projection period and reviewed for reasonableness.
- B. The ENGINEER will create reproducible traffic projection maps for each of the projection periods.

ADDITIONAL SERVICES

TASK 4: CAPACITY ANALYSES

- A. The ENGINEER will complete a series of Highway Capacity Manual (HCM) computations to evaluate existing conditions at up to 20 critical operation locations identified by the model or as requested by the City.
- B. The ENGINEER will complete a series of Highway Capacity Manual (HCM) computations to evaluate future conditions at the previously analyzed 20 locations for each of the three previously define future year projections.
- C. The ENGINEER will summarize the levels of service and indicate improvement needs for the analyzed locations.

TASK 5: IMPROVEMENT RECOMMENDATIONS

- A. The ENGINEER will define traffic control and geometric improvement needs which should be implemented on a short term and long-term basis for up to 20 critical operation locations identified by the model or as requested by the City.
- B. Based on field reviews of the defined improvement needs at each study location, the ENGINEER will prepare estimates of the construction costs that should be budgeted for short term and long-term projects. These cost estimates will be based on unit cost per linear foot of lane addition, per traffic signal installation / modification, and other gross unit of measure which would be derived and submitted to the City Engineer for approval prior to use in the study results.
- C. The ENGINEER will prepare a prioritization of the improvement measures based on levels of service, benefit / cost, and system wide compatibility.
- D. The ENGINEER will prepare an update to the report which summarizes the improvement recommendations, the methods used in the analyses, and implementation priority.
- E. The ENGINEER will present the recommendations report to the City Planning Commission and City Council.

TASK 6: SOFTWARE TRAINING

- F. The ENGINEER will provide VISUM software training for City staff specific to the City's existing Travel Demand Model

DELIVERABLES

City shall receive three sets of the Traffic Model Update documents. GBA will also prepare an electronic copy of the document in PDF format for use by the city.

SCHEDULE

The field data collection portion of the project shall be completed within 45 calendar days after receipt of a notice to proceed. The preparation of model update will be completed within 120 days after receipt of Notice to Proceed. The schedule for Additional Service will be determine at the time the work is authorized.

COMPENSATION

Tasks 1, 2 and 3 shall be completed for a not to exceed amount of Eighty-One Thousand, Seven Hundred Fifty-Six Dollars (\$81,756.00). When requested, the Additional Services which included Tasks 4, 5 and 6, shall be completed for Forty-One Thousand, Five Hundred Forty-Six Dollars (\$41,546.00). Any serviced required by the City staff outside of the scope of services shall be at an hourly charge out rate plus expenses, as illustrated on the attached ***Attachment A***.

DRAFT

EXHIBIT A1
Calibration Nodes

1. Chesterfield Airport Road with Oliver Street Road
2. Chesterfield Airport Road with Spirit of St. Louis Blvd
3. Chesterfield Airport Road with Long Road
4. Chesterfield Airport Road with Boone's Crossing
5. EB I-64 Ramps with Boone's Crossing
6. WB I-64 Ramps with Boone's Crossing
7. Chesterfield Airport Road with Baxter Road
8. Chesterfield Parkway West with Wild Horse Creek Road
9. Chesterfield Parkway West with WB I-64 Ramps
10. Clarkson Road with Kehrs Mill Road
11. Clarkson Road with Wilson Avenue
12. Clarkson Road with Baxter Road
13. Clarkson Road with Chesterfield Parkway
14. Clarkson Road with EB I-64 Ramps
15. Oliver Blvd with WB I-64 Ramps
16. Olive Blvd with Chesterfield Parkway
17. Olive Blvd with Ladue Road
18. M-141 with Olive Blvd
19. M-141 with Ladue Road
20. M-141 with Conway Road
21. M-141 with WB I-64 Ramps
22. M-141 with EB I-64 Ramps
23. Clayton Road with NB M-141 Ramps
24. Clayton Road with SB M-141 Ramp
25. Clayton Road with Woods Mill Road
26. Clayton Road with Baxter Road
27. Chesterfield Parkway East with Conway Road
28. Chesterfield Parkway East with WB I-64 Ramp
29. Chesterfield Parkway East with EB I-64 Ramp
30. Wild Horse Creek Road with Long Road
31. Wild Horse Creek Road with Kehrs Mill Road
32. Wild Horse Creek Road with Wilson Road
33. Wild Horse Creek Road with Baxter Road
34. Boone's Crossing with North Outer Forty Road
35. Baxter Road with Edison Avenue
36. Long Road with Edison Avenue
37. Olive Boulevard with Woods Mill Road
38. Clayton Road with Schoetlier Road
39. Schoetlier Road with South Outer Forty Road

GEORGE BUTLER ASSOCIATES, INC.
 8207 MELROSE DRIVE, SUITE 200
 LENEXA, KANSAS 66214
 (913) 492-0400

***DRAFT* ATTACHEMENT A - MANHOOR ESTIMATE**

Date: 12/13/2017
 Client: Chesterfield, MO
 Project: Traffic Model Update
 Made by: MJA

TASK / SUBTASK	Firm		Project AES \$130.00	Design AES \$110.00	Design Tech I \$95.00	Sr Admin Assist \$93.00	TOTAL LABOR COSTS	OTHER DIRECT COSTS		TOTAL FEE
	Principal \$268.00	Associate \$188.00						ITEM	COST	
TASK 1 - MODEL UPDATE										
A. Compile and Update Land Use Information including Meeting with City	1	16	20				\$5,876.00	Travel	\$500	\$6,376.00
B. Review Modeling Process and Expectations with MoDOT and St. Louis County		4	4				\$1,272.00			
C. Update the Link & Node system	1	4	40				\$6,220.00			\$6,220.00
D. Evaluate and Update Existing City Count Databases (39 locations)	1	4	20				\$3,620.00	Traffic Counts	\$13,800	\$17,420.00
E. Update Project Modeling Workbook	1	16	40	24			\$11,116.00			\$11,116.00
F. Create Reproducible Maps Using Graphic Parameters		2	16	4	4		\$3,276.00			\$3,276.00
G. Coordinate Model Update with Transportation Master Plan Development	2	40	40				\$13,256.00			\$13,256.00
SUBTOTAL	6	86	180	28	4	0				\$57,664.00
TASK 2 - MODEL CALIBRATION										
A. Complete VISUM Modeling Runs	1	12	40				\$7,724.00			\$7,724.00
B. Update and Maintain Project Records		4	8	8			\$2,672.00			\$2,672.00
C. Review VISUM Calibration with Model Review Committee (MRC)	4	8	8				\$3,616.00	Travel	\$500	\$4,116.00
SUBTOTAL	5	24	56	8	0	0				\$14,512.00
TASK 3 - NEAR-TERM AND LONG-TERM MODEL SCENARIOS										
A. Establish Projection Periods and Run Model	1	8	40				\$6,972.00			\$6,972.00
B. Create Reproducible Maps		2	8	4	4	4	\$2,608.00			\$2,608.00
SUBTOTAL	1	10	48	4	4	4				\$9,580.00
BASE PROJECT TOTAL HOURS :	12	120	284	40	8	4	\$68,228.00		\$14,800	\$ 81,756.00
TASK 4 - CAPACITY ANALYSES										
A. Evaluate Existing Conditions	1	4	40				\$6,220.00			\$6,220.00
B. Evaluate Future Conditions	1	8	60				\$9,572.00			\$9,572.00
C. Summarize Levels of Service	1	8	20	20			\$6,572.00			\$6,572.00
SUBTOTAL	3	20	120	20	0	0				\$22,364.00
TASK 5 - IMPROVEMENT RECOMMENDATIONS										
A. Define Improvement Measures	1	8	8				\$2,812.00			\$2,812.00
B. Prepare Improvement Cost Estimates	1	8	24				\$4,892.00			\$4,892.00
C. Prioritize Improvement Needs	1	4	8				\$2,060.00			\$2,060.00
D. Update Improvement Recommendations Report	1	8	16				\$3,852.00	Printing	\$150	\$4,002.00
E. Present Report to City Planning Commission and City Council		8	8				\$2,544.00	Travel	\$500	\$3,044.00
SUBTOTAL	4	36	64	0	0	0				\$16,810.00
TASK 6 - SOFTWARE TRAINING										
A. Provide VISUM Training to City Staff						4	\$372.00		\$2,000	\$2,372.00
SUBTOTAL	0	0	0	0	0	4				\$2,372.00
ADDITIONAL SERVICES TOTAL HOURS :	7	56	184	20	0	4	\$38,896.00		\$2,650	\$ 41,546.00
TOTAL HOURS :	19	176	468	60	8	8				
TOTAL FEE :	\$5,092.00	\$33,088.00	\$60,840.00	\$6,600.00	\$760.00	\$744.00	\$ 107,124.00	\$ -	\$17,450	\$ 123,302.00

C:\Users\rcolson\Documents\Chesterfield Ints\Exhibit A1.dwg Layout: Exhibit A1 --- Monday December 11, 2017, 9:47am --- Copyright 2017, George Buller Associates, Inc. Architect 00212, Professional Engineer 000133, Landscape Architect 000025, Professional Land Surveyor 000039

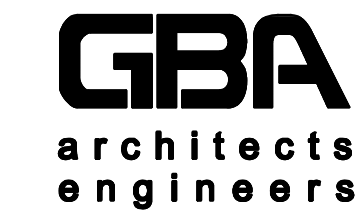
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37. Olive Blvd with Woods Mill Road *
38. Clayton Road with Schoettler Road *
39. Schoettler Road with South Outer Forty Rd *

* Possible Count Locations



9801 Renner Boulevard
Lenexa, Kansas 66219
913-492-0400
www.gbateam.com

DATE:	
DESIGN BY:	
DRAWN BY:	
PROJECT NO.:	
SHEET NO.	TOTAL SHEETS

XXXX XXXX XXXX
Professional Engineer
License No. XXXXXX

NO.	DATE	REVISIONS	BY	APPROVED

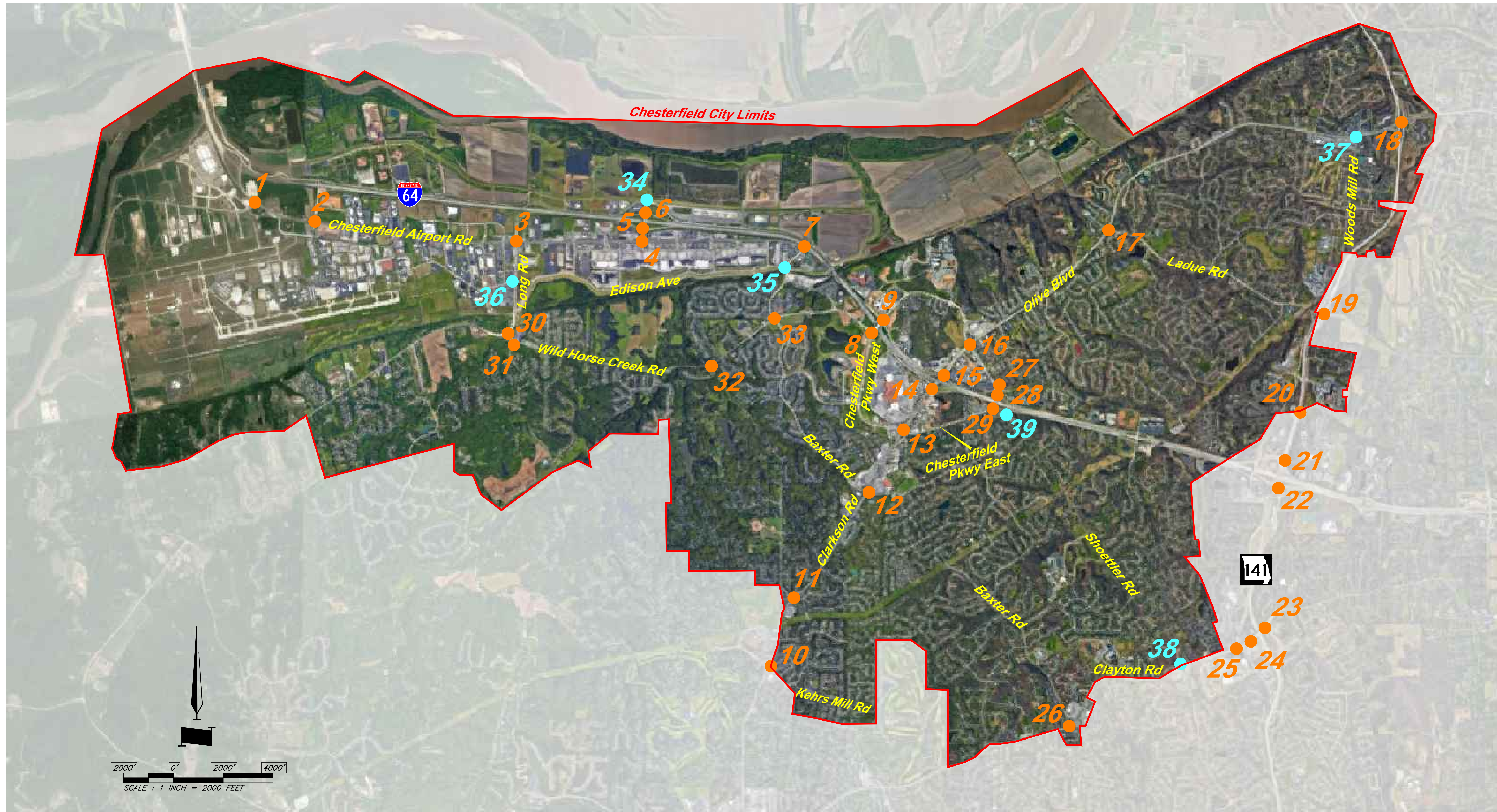


Exhibit A1 - Calibration Node Locations