



Comprehensive Operations
Analysis (COA)
Scope of Work

MARCH 2024

SCOPE OF WORK

PHASE 1 – TASKS 1 & 2: LAUNCH AND SYSTEM ANALYSIS

TASK 1: PROJECT MANAGEMENT

Consultant's project manager is expected to closely coordinate with GLPTC's project manager to successfully carry out project tasks, and to stay on scope, schedule, and budget.

TASK 1.1: PROJECT MANAGEMENT PLAN AND SCHEDULE

Upon notice to proceed, Consultant will develop a Project Management Plan within 15 business days for GLPTC review and approval. The project management plan will establish working expectations between Consultant and GLPTC, in accordance with the project objectives, scope of work, budget, and timeline.

The project management plan should include an organizational chart, roles and responsibilities, task listings and descriptions. It should also include a working project schedule that would be updated regularly with task start dates, duration, milestones, and critical path items.

The schedule should assume a 14-to-18-month project timeline from project kick-off meeting to GLPTC Board of Directors' adoption of a final/accepted Comprehensive Operations Plan. The COA is the primary element of work, GLPTC anticipates that there will be additional tasks related to this work described under Task 6: Follow-On Tasks.

TASK 1.2: KICK-OFF MEETING

Consultant will convene a kick-off meeting with GLPTC's project manager and staff to review the Project Management Plan and to agree on project objectives, approach, tasks, schedule, and deliverables.

TASK 1.3: Team Coordination

Consultant's and GLPTC's project managers will lead project coordination. There should be team meetings held at a minimum every two weeks (bi-weekly) to review project status, plan for upcoming work, and identify and resolve critical issues. Consultant will prepare team meeting agendas ahead of meetings and provide meeting summaries after each meeting. It is expected that the Consultant will be in close communication with GLPTC's project manager in between meetings.

Deliverables: Project management plan and schedule; Kick-off meeting agenda and meeting summary; Bi-weekly meeting agenda and meeting summary.

TASK 2: HIGH LEVEL SYSTEM ANALYSIS

This task entails an evaluation of the existing GLPTC system and services to assess its effectiveness and efficiency. Consultant should review ridership data, schedule information, schedule adherence, peer agency metrics, and other information to be identified by Consultant to establish a deep understanding of GLPTC's current service performance at the route and network levels.

GLPTC seeks to understand how the pandemic has shifted transit ridership and demand. While GLPTC's ridership has increased since the height of the pandemic, and some routes now exceed pre-pandemic levels, not all routes have recovered. It is expected that, looking forward, ridership changes may be affected by the impacts of housing shortage, community growth, and other factors affecting the use of fixed-route transit in the community.

Questions GLPTC is seeking answers to include:

- As new housing is being built, how can GLPTC provide the best service to the most people possible?
- How can we ensure equity in provision of service, particularly in areas of persistent poverty?
- How can GLPTC's ability to partner for economic development aid in creating transit that is co-located with other needed amenities such as housing and childcare?

TASK 2.1: Existing System & Service Performance

Consultant will review and assess GLPTC's existing service and system performance to understand GLPTC's strengths and identify specific areas for improvement. GLPTC will provide the selected Consultant with relevant agency data and resources such as:

- Automatic Passenger Counter (APC) and Automatic Vehicle Location (AVL) data.
- National Transit Database (NTD) and American Bus Benchmarking Group (ABBG) data.
- Fare system data.
- Fixed-Route Service standards.
- Performance and financial reports.
- Origin-Destination surveys.
- Title VI reports.
- Strategic Business Plan data.
- Long-Range Transit Plan.
- Other requested data, policies, and documents.

GLPTC seeks creative input from Consultant in understanding factors that affect system efficiency such as:

- Frequency (both current and in relation to demand).
- Service span and days of operation by route.
- Route performance at key time periods, varying markets, and day type.
- Opportunities and needs for transfers.
- Route design and complexity, including deviations.
- Stop spacing relative to ridership and service frequency.
- Interlining.

- Station Pulse/Hybrid System.
- In-service time/paid time ratio – deadheads, layover, recovery, etc.
- Adherence and running times.
- Operational constraints of station design and infrastructure.

TASK 2.2: Concurrent Regional Projects

Consultant should review GLPTC's current and other local transportation projects to ensure analysis and recommendations are aligned with GLPTC's strategic goals. GLPTC will provide project materials and help Consultant coordinate with these projects as needed. These concurrent projects include:

- a. CityVan service starting in late 2023.
- b. Area Plan Commission projects.
- c. City of Lafayette projects.
- d. City of West Lafayette projects.
- e. Tippecanoe County projects.
- f. Purdue University projects.
- g. Purdue Research Foundation projects.
- h. INDOT projects in the region.

Deliverables: Technical memorandum of Task 2 analysis; Presentation materials.

PHASE 2 – TASKS 3 & 4: COMMUNITY-FOCUSED REDESIGN

TASK 3: OUTREACH AND ENGAGEMENT

GLPTC customers, the Board of Directors and staff, and other community stakeholders will play important roles in helping shape the COA outcomes. Consultant will lead the outreach and engagement strategy, messaging, and execution with GLPTC review and support. GLPTC anticipates the following levels of engagement:

Phase 1: Inform – Informing the public that we are conducting a COA.

Phase 2: Consult – Establishing existing conditions and transit needs.

Phase 3: Involve – Development of three-year service plan to be adopted by the Board.

Consultant will develop an Outreach and Engagement Plan (OEP). The OEP should describe how input will be used to inform recommendations and decision-making processes.

Consultant should propose engagement strategies that include a hybrid combination of virtual and in-person communications. This may include online and in-person meetings and workshops. GLPTC is open to and encourages innovative public engagement techniques.

At a minimum, the engagement plan should include:

- a. A schedule with milestones.
- b. Engagement strategies leading up to each milestone completion.
- c. A series of in-person and virtual public workshops.
- d. Online strategies, including project webpage, social media, and email campaigns.
- e. A variety of engagement strategies for different types of stakeholder groups.

TASK 3.1: Engagement with Customers

Customers is intended to be a broad term, including passengers, community members, and all other stakeholders. Engagement should include the establishment of an Advisory Committee comprised of a cross section of GLPTC's customer base. There should be different engagement strategies for riders, non-riders, community-based organizations, and educational institutions. GLPTC will work with the Consultant to identify stakeholder groups within GLPTC's service area. GLPTC particularly values engagement with historically marginalized populations and communities.

TASK 3.2: Engagement with GLPTC Board of Directors

Consultant will facilitate engagement with GLPTC's Board of Directors to obtain feedback that can be used in developing options for service improvement scenarios and recommendations. These engagements may include work sessions. At a minimum, Consultant will collaborate with GLPTC staff to keep the Board of Directors engaged and up to date on key project milestones. The Board of Directors may direct staff and Consultant to present or provide further project information at the Board's discretion.

TASK 3.3: Engagement with GLPTC Staff and Community Partners

GLPTC values collaboration and makes every effort to gather input from our staff and community partners. To that end, the engagement plan should include opportunities for GLPTC bargaining unit employees and administrative staff, and community partners, to engage in the COA process.

Consultant should also engage with partner entities including the City of Lafayette, City of West Lafayette, Tippecanoe County, and the Area Plan Commission.

Deliverables: Outreach and Engagement Plan; Materials associated with engagement plan implementation; Meetings and workshop summaries

TASK 4: PROPOSED SYSTEM RECOMMENDATIONS

Task 4 comprises the technical analyses that form the basis for Consultant recommendations.

TASK 4.1: Demographic and Socioeconomic Profile

It is important for GLPTC to understand the impact its services have on the community. Consultant will develop a service area profile of demographics and socioeconomic characteristics. This should include a process for allocating service resources using a systematic analysis of routes or route segments that may carry more transit dependent riders, including ridership in areas with populations that are low-income, people of color, zero car households, or people with disabilities. The analysis should include maps, charts, or graphs illustrating the service area profiles.

TASK 4.2: Route Network Recommendations

Consultant will propose route structure recommendations informed by Task 2, Task 3, and Task 4.1 that best meet the current and projected mobility needs of the community. Performance metrics used to formulate proposed routes may include ridership, productivity, coverage, accessibility, connectivity, speed and reliability.

TASK 4.3: Transit Station Network Recommendations

GLPTC currently has a single transit station in downtown Lafayette that serves most city routes. This station serves as a hub for the pulse-based system where multiple routes leave and arrive at regular intervals. As the service area developed since the agency's establishment, various hubs of activity have grown outside of downtown. GLPTC is open to proposals that may include additional transit stations throughout the service area. Consultant will propose transit station recommendations that support and facilitate the route network recommendations in Task 4.2.

TASK 4.4: Bus Stop Recommendations

Consultant will evaluate GLPTC's current network of bus stops and present recommendations to identify opportunities for balancing to increase efficiency in the proposed network. This may result in some bus stop relocation, consolidation, or removal. Recommendations should include bus stop

placement criteria and methodology for various levels of amenities and improvements. GLPTC will provide current bus stop inventory and other data necessary for Consultant to perform this task.

TASK 4.5: Transit Market Analysis

A key objective of this subtask is to understand the size and strength of possible markets (e.g., demographics & geographic) for GLPTC's fixed route services. The market analysis is intended to examine the propensity (expected transit use) and viability of serving these markets. Through this analysis, GLPTC seeks insights into how it can design its services to better capture an increased share of those markets efficiently and effectively.

The analysis may include transit connections with other travel modes, existing and future major housing, educational and commercial development areas, and first mile-last mile connections.

Consultant may also assess existing GLPTC infrastructure including bus stops and stations as well as sidewalks, streets, and paths to understand pedestrian accessibility to GLPTC's fixed route transit services.

TASK 4.6: Future Ridership Analysis

Forecasting future ridership is an important component in planning service and network design. Building off of previous tasks, Consultant will develop methodologies to project future ridership and ridership pattern within a 3 to 5 year horizon relative to the current COA cycle. This may include developing rider-shed maps of potential riders. Ridership forecast will take into consideration post-COVID travel trends and travel behavior. The ridership pattern should include commuting, educational, recreational, and other trip purposes.

TASK 4.7: Optimal Vehicle Mix Recommendations

GLPTC operates a mix of transit vehicles which include 40' buses, and 60' articulated buses. The articulated bus fleet is used primarily to manage heavy loads in response to both university/college ridership and regular non-school commute patterns on key corridors. GLPTC is interested in determining the optimal mix of 40' and 60' buses in the context of expected increases in ridership and service on the proposed network.

Deliverables: Technical memorandum of Task 4 analysis and recommendations; Presentation materials.

PHASE 3 – TASKS 5 & 6: IMPLEMENTATION

TASK 5: COA ADOPTION

Building on analysis and recommendations in previous tasks, Consultant will develop scenarios for service and system improvements that meet project objectives.

TASK 5.1: Draft Report and Engagement

The draft report should outline in an engaging and easy to digest format the benefits and trade-offs of each recommendation. It should also identify recommendations that fall into the three-year COA planning horizon, a recommended phasing priority based on available and anticipated resources and anticipated longer term actions.

This will involve public outreach and engagement to refine the draft recommendations or service scenarios. This includes presentations and dialogue with stakeholders outlined in previous tasks.

TASK 5.2: Final Report and Adoption

Consultant will produce a final report and presentation that summarizes all analyses recommendations and deliverables described in Tasks 2 through 5.1, a final summary of outreach and engagement, and recommendations for a phased three-year service plan. Consultant will participate in presentation of a Board Draft and Final report recommendations for adoption by the Board of Directors.

Deliverables: Recommendations with supporting materials including maps, graphics, charts; presentation materials; Final report.

TASK 6: FOLLOW-ON TASKS

Development and implementation of the COA is intended to support GLPTC with other planning, operational, and capital improvement decision-making processes. During this cycle, GLPTC may seek Consultant support with follow-on tasks that may include:

- a. Fixed route transit performance monitoring, evaluation, and reporting.
- b. Non-fixed route mobility options and coordination, e.g., regional bike share connections to fixed route transit.
- c. Update GLPTC's policies and procedures to reflect COA outcomes.
- d. Other data gathering and analysis needs.