Prepared for Mississippi State University

Campus Parking Study #24-48
Walker Consultants Technical Proposal
ORIGINAL

June 6, 2024

WALKER
CONSULTANTS

Contents

ORIGINAL

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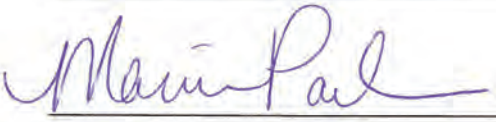
Signature Page

APPENDIX A: SIGNATURE PAGE

Provide information requested, affix signature and return this page with your proposal:

Name of Firm:	Walker Consultants, Inc.
Complete Address:	2180 Satellite Boulevard, Suite 250
	Duluth, GA 30097
Telephone Number:	678.534.3860
E-mail Address:	mparker@walkerconsultants.com
Authorized Signature:	
Printed Name:	Marion Parker
Title:	Managing Principal

02

Cover Letter

WALKER CONSULTANTS

2180 Satellite Boulevard, Suite 250
Duluth, GA 30097
678.534.3860 walkerconsultants.com

June 4, 2024

Jennifer Mayfield
Office of Procurement and Contracts
Mississippi State University
610 McArthur Hall
245 Barr Avenue
Mississippi State, MS 39762

Re: Proposal for Mississippi State University Campus Parking Study

Dear Jennifer and Selection Committee:

Walker Consultants and its internal multidisciplinary team are pleased to submit the following proposal for professional services for the Mississippi State University ("MSU" or "the University") Campus Parking Study. We have enjoyed our conversations and interactions with Jeremiah and his team over the past year or so, discussing this upcoming RFP and providing support and examples of previous studies and scopes with which we were involved. We understand that the University is seeking comprehensive transportation and parking consulting services to guide future decision-making in coordination with campus-wide planning efforts.

The proposed campus parking study will result in a practical, visionary, and implementable strategy to enhance MSU's ability to support anticipated campus growth and evolution with a nimble and comprehensive transportation, parking, and mobility program that enhances the campus community's access and experience. Our approach will align with the overarching goals of the MSU Campus Plan, which indicates substantial academic building and student housing expansions, a sustainable mobility framework, and lofty energy and emissions goals. As the Campus Plan states, parking will continue to be a critical factor in the overall success of the transportation system at MSU, and parking management and operations strategies can help support a premier user experience and the longevity of a healthy parking system. However, a more balanced and sustainable mobility system involves the creation of new policies and programs that shift the culture of car dependency and offer alternative mobility options that dovetail with our campus goals and community needs. MSU's stated goals for the campus parking study are consistent with Walker Consultants' approach to University projects and mesh with our competencies and ethos.

1. We seek first to help the University use its existing facilities and resources efficiently and effectively to optimize and capitalize upon the investments it has already made—distributing parking demand more evenly through the system.
2. Secondly, we seek to improve connectivity on, through, and around campus, to minimize vehicular circulation and congestion on campus, and to support a park-once philosophy (among those who elect to—or must—drive to campus).
3. Third, we seek to reduce overall parking demand by helping the University develop, customize, implement, measure, and fine-tune transportation demand management (TDM) strategies and the support services that make those programs more accessible to more campus constituents.
4. Last, and only to address that demand which cannot be mitigated by the first three steps, we help the University find ways to meet that demand in the ways that have the least financial and environmental impact. This may be underutilized capacity in the surrounding areas (or in commuting origins to campus). If all other options are exhausted, we will help the University identify the right location, size, and timing for additional parking infrastructure. We realize that all mobility, transportation, and parking decisions are land-use planning decisions.

2180 Satellite Boulevard, Suite 250
Duluth, GA 30097
678.534.3860 walkerconsultants.com

Walker Consultants offers you the following benefits:

Walker brings expertise and deep operational and financial experience in parking and transportation demand management (TDM) programs, transit and shuttle service planning, complete streets, micro-mobility, micro-transit, and curb management. Your principal in charge, David Lieb, TDM-CP, spent 25 years working in higher education transportation, transit, and parking operations at Cornell University and the University of Colorado Boulder. His entire career has been focused on TDM, mobility, and parking. Since joining Walker in 2015, David has led projects at over 70 colleges and universities. David is supported by an all-star team that includes certified planners and TDM professionals, operations and technology experts, and another former university parking director.

The Walker team goes well beyond university operational experience, bringing in expertise that will help Mississippi State University be on the leading edge of building a truly integrated mobility system. This system balances parking supply and demand and encourages alternatives to single-occupant vehicles, affording greater priority to pedestrians, bicyclists, micro-mobility users, transit riders, and people with disabilities, and making the campus more connected and livable.

We truly believe that you cannot fully understand parking without extensive TDM experience, nor deliver effective TDM plans without deep parking knowledge. We have both.

As we will demonstrate, Walker has the resources, personnel, knowledge, and experience to undertake all aspects of the scope of services provided. Our long history of parking expertise and our highly skilled mobility experts uniquely position Walker to undertake multimodal, broad-based studies. We will work with Transportation at MSU and other campus stakeholders to provide the requested services comprehensively, economically, and seamlessly. The campus parking study will review, analyze, make recommendations, and provide specific timelines for implementing service changes, improvements, and modifications.

Walker acknowledges the information in this proposal is accurate and is committed to providing the services as stated in this response. Walker has no exceptions to the terms and conditions stated in the RFP. We appreciate the opportunity to submit this proposal and look forward to serving Mississippi State University.

Sincerely,

WALKER CONSULTANTS

David J. Lieb, TDM-CP
Principal-In-Charge
National Director of Higher Ed Mobility Planning
607.227.6801 | DLieb@walkerconsultants.com

Jeremy Greenwald, AICP, TDM-CP
Project Manager
JGreenwald@walkerconsultants.com
757.560.0945

03

Corporate Structure and Credentials

Company Profile

Walker Consultants provides planning, design, engineering, forensics, restoration, and building envelope consulting.

We are a 100% employee-owned company that takes pride in the work that we do and the value that we provide our clients. Our culture is defined by integrity, honesty, and high standards.

We started in 1965 as structural and civil engineers and have grown to include architects, building envelope experts, forensics engineers, transportation planners, and parking consultants—all to better serve our clients with cost-effective and innovative solutions.

Offices 27

Staff 325

States Served 50

Countries Served 55

Repeat Customers 85%

ENR Ranking (2024) 277

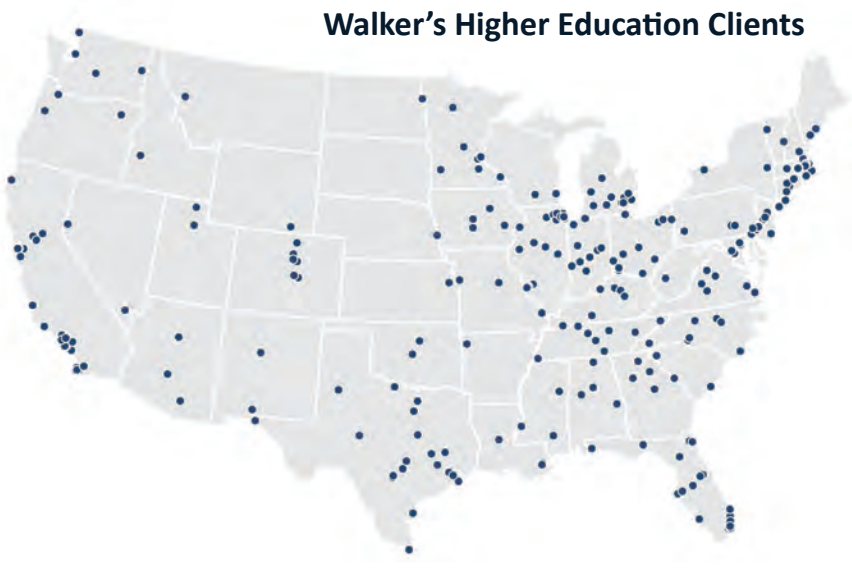
Solutions from Start to Finish—and Beyond

When your project is in its infancy, we can provide parking planning and consulting, including financial analysis. In the design phase, Walker provides building envelope design, peer reviews, and quality control checks for all types of structures. For parking structures, our industry-leading design services cover everything from architectural to structural, functional, and mechanical considerations.

For existing structures, Walker can support you as you maintain it. We provide assessments and investigations for all building types to assist owners in maintaining good conditions, and critical reviews and advanced analysis in the case of failures. Our experts develop cost-effective and long-lasting repair designs and asset management plans for all structures. We also assess safety, ADA, MEP, and property conditions.

Thinking beyond the structure, Walker's specialists can help you refine the user experience with cutting-edge solutions that improve access: everything from curb management and multi-modal planning to parking operations reviews and technology updates. Our tailored, out-of-the-box approach to planning is built on inclusivity and stakeholder buy-in.

Walker's Higher Education Clients



Walker has been serving the higher education market throughout its history, starting with a parking structure at Ball State University in 1972.

Since then, the firm has worked with more than 500 educational institutions throughout the United States.

Walker at a Glance

01
Full Service, Single Focus

We are a consulting firm **dedicated to meeting a broad spectrum of client needs** by offering multi-disciplinary services. Our experts in **planning, design, engineering, forensics, restoration, and building envelope** come together with a singular focus on delivering solutions.

02
Global Experience, Local Knowledge

We've consulted on, designed, investigated, and restored projects nationwide and around the world, **developing in-depth local knowledge of geographic markets both domestic and international.** Our 27 offices place us within two hours of every major metropolitan area in the United States.

03
Experienced Staff, Creative Minds

Our project teams pair industry experts who bring decades of experience with young talent to produce creative solutions. The result? **Staff at all levels who have learned from the very best in their fields,** and collaborations that have led to thousands of successful projects and a deep bench of qualified professionals.

04
Quality Work, Loyal Customers

We strive to continually deliver high quality work for our clients and we consistently out-perform the industry with regards to client satisfaction and loyalty. The result has been a **repeat client rate of more than 85%.** For design projects, our change order rate is **1/10th the industry average.**

05
Practical Experience, Proven Solutions

Our experts conduct original research, stay ahead of industry trends, and maintain proprietary libraries of reference material. We take special care to make recommendations and engineer solutions that are **progressive, but also realistic and implementable.**

Planning & Mobility

Walker's transportation, technology, operations, and policy experts connect people to destinations by improving access.

From ideation to implementation, we create value by ensuring that you are making the most of your assets.

Meeting the needs of owners and users is the centerpiece of Walker's parking and transportation planning services. Our practice focuses on inclusivity and stakeholder buy-in. Our solutions are practical, cost-effective, and tailored to your situation.

Our solutions are practical, cost-effective, and tailored to your situation.

- Airport Landside Plans
- Bicycle and Pedestrian Plans
- Curb Management
- Mobility Studies and Plans
- Municipal Code Studies and Updates
- Parking Supply/Demand
- Shared Parking Plans
- Transportation Demand Management Plans (TDM)
- Parking Allocation and Pricing Strategies

Financial Feasibility Studies

Our market, economic, and financial feasibility studies have assisted owners with securing more than $2 billion in financing on projects involving virtually all land use types that feature paid parking.

- Due Diligence Studies of Parking Assets
- P3 Parking Asset Monetization
- Parking Market and Financial Studies
- Financing and Bond Documents

Curb Management

In our rapidly changing world, the humble curb is seeing a convergence of competing uses. From an increase in pick-ups and drop-offs to new ways to get around like shared bikes and scooters, curb space must be managed to ensure accessibility, safety, and circulation.

The curb is more than just vehicle storage or a path of travel: it is there to serve people. It's a vital community space and one of the most extensive and valuable assets in a city. A good curb design promotes access and activity, drawing more customers for businesses.

Curb space is a valuable asset that must be managed to provide greater access.

Walker aligns public and private sector goals through tools including zoning, parking regulations, traffic engineering, and financing mechanisms. With active and intentional curb management, communities can make access more equitable between different users, improve level of service for everyone, collect data on transportation behaviors, and create a sustainable revenue source.

Walker's curb management team can help you create plans, policies, and designs that bring order, enhance safety, support local business, and provide better access and mobility options.

- Collect data to understand existing curb inventory and current usage patterns, and model future demands
- Engage the community and businesses on mobility needs and curb prioritization
- Determine how underused parking lots, off-street loading zones, and garages can take pressure off of the curb
- Integrate pick-up and drop-off in design for existing and new parking facilities
- Evaluate how mobility trends and changing curb demands and allocation affect private vehicle parking availability and revenues
- Determine curb access fees, model pro forma financial impacts, and implement these fees
- Implement data collection, monitoring technology, and analytics to adapt policies based on trends, agreements, RFPs, and regulations
- Draft mobility operator/vendor agreements and regulations
- Design specifications for technology to monitor curb usage, optimize allocation, and enforce regulations
- Choose the right technology option for implementation

Services

Parking Design

- Architecture & Engineering
- Functional Design
- Queuing Analysis
- Wayfinding/Signage
- Adaptive Reuse
- Automated Parking Guidance Systems (APGS)
- Automated Vehicle Storage and Retrieval Systems (AVSRS)
- Autonomous Vehicles
- Parking Access & Revenue Control Systems (PARCS)
- Traffic Simulation
- Sustainability
- ParkSmart Certification
- Design-Build Project Delivery

Planning & Mobility

Planning

- Bicycle and Pedestrian Plans
- Mobility Studies and Plans
- Municipal Code Studies and Updates
- Parking Supply/Demand
- Shared Parking Plans
- Transportation Demand Management Plans (TDM
- Parking allocation and pricing strategies

Curb Management

- Data Collection and Inventory
- Stakeholder Engagement
- Curb and Loading Zone Planning and Design
- Curb Access Fees, Financial Modeling, and Implementation
- Vendor RFPs and Agreements

Financial Feasibility

- Due Diligence Studies
- Market and Financial Analyses
- P3 Monetization

Operations & Technology

Operations

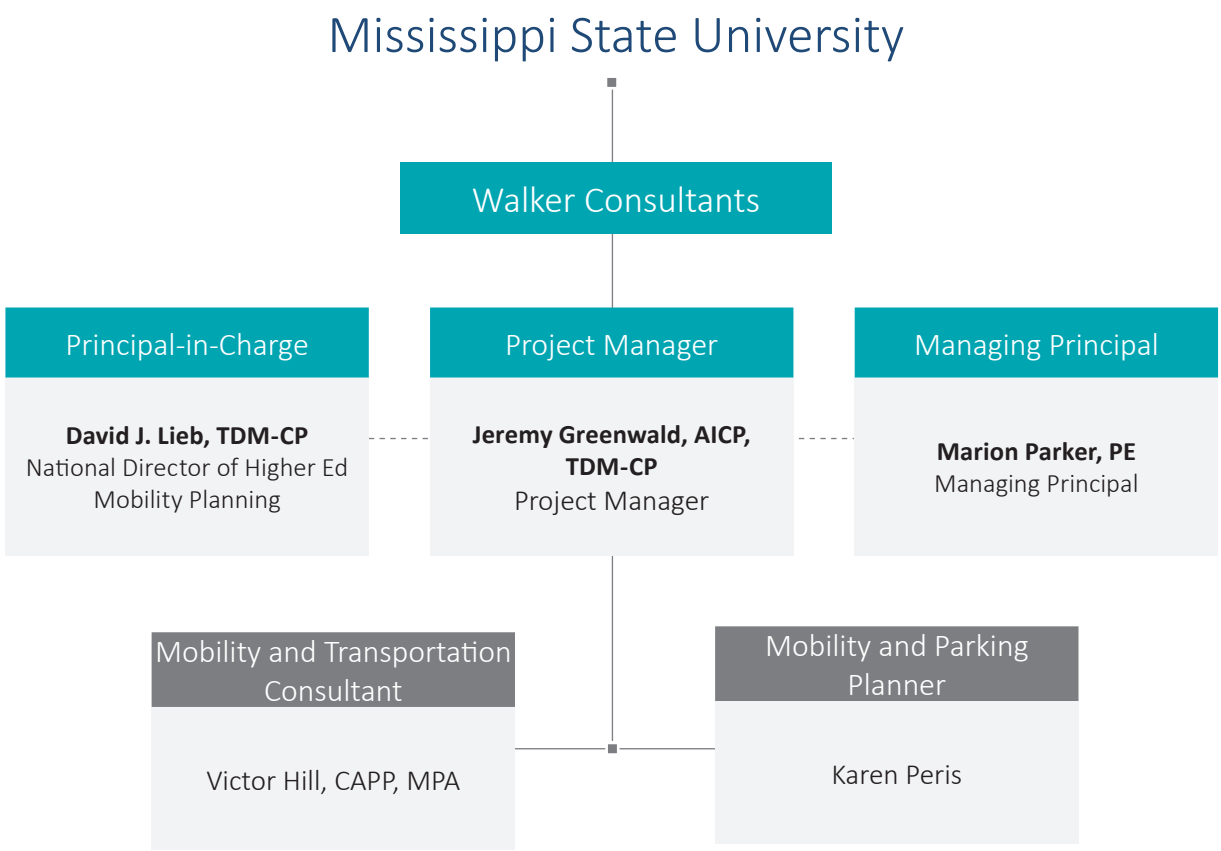
- Operational Audits & Plans
- Parking Operator RFPs
- Curb Management Plans
- Valet Parking Plans
- On-Street Parking Operations, Enforcement, Technology, and Policy

Technology

- License Plate Recognition (LPR)
- Reservation Systems and Apps
- Collection Security Analysis
- On-street parking system designs
- PCI compliance
- Procurement of revenue and enforcement technologies

Project Team Organization

The success of your project will depend upon a wide variety of factors. No factor is more important than the people that will work on the project. The team we have assembled for your project has been carefully selected to provide the specialized services that your project requires. Our team clearly understands your project needs and requirements.



David J. Lieb, TDM-CP

Principal in Charge/National Director of Higher Ed Mobility Planning

David Lieb is Walker Consultants' National Director of Higher Ed Mobility Planning Services. Based in the Denver office, he specializes in parking and transportation demand management (TDM) strategies and operations at colleges and universities. David joined Walker in 2015, after 25 years of experience at Cornell University and the University of Colorado-Boulder, operating and leading cutting-edge and innovative parking and TDM programs. Since joining Walker in 2015, David has worked with more than 70 colleges and universities, helping them improve customer service, operational efficiencies, financial performance, and sustainability initiatives.

With his roots in communications and marketing, David brings a wealth of experience working with teams, stakeholder groups, community members, senior leadership, transit agencies, and the media. He helps clients develop programs, policies, and systems that are effective, efficient, and customer-service friendly. His experience managing demand can help clients reduce congestion and achieve financial and environmental sustainability goals.

Key Experience

Higher Education Mobility and Parking Planning

Transportation Demand Management Strategies

Stakeholder Engagement

Community Development

Education

Master of Professional Studies, Cornell University

Bachelor of Arts, Cornell University

Experience

25 years

Affiliations

Association for Commuter Transportation (ACT)

National Association of College Auxiliary Services (NACAS)

Society for College and University Planning (SCUP)

Ithaca Carshare, Inc.

Project Highlights

University of Arizona
Mobility Master Plan

University of New Mexico
Integrated Campus Plan

Humboldt State University
Mobility and Parking Analysis/Study

University of Iowa
Mobility and Parking Master Plan

Austin Peay State University
Mobility and Parking Master Plan

Texas A&M University
Transportation Mobility Plan

University of Missouri
Mobility and Parking Master Plan

University of Toledo
Parking Monetization

California Poly San Luis Obispo
Market Demand Analysis

University of Louisville
Transportation/Parking Master Plan

Clemson University
Operational Assessment

Alcorn State University
Parking and Transportation Planning

Emory University
Transportation Plan

Drake University
Mobility and Parking Plan

University of Wyoming
Mobility and Parking Study

University of San Diego
Mobility and Parking Plan

Illinois State University
Parking Facilities Master Plan

The College of William and Mary
Transportation/Parking Master Plan

University of West Florida
Planning Study

Texas Christian University
Parking Allocation and Shuttle Plan

Jeremy Greenwald, AICP, TDM-CP

Project Manager

Key Experience

Transportation and Mobility Planning

Transportation Demand Management

Financial Feasibility Studies

Education

Master of Science, Transportation Engineering, Georgia Tech

Master of City and Regional Planning, Georgia Tech

Bachelor of Science, Civil Engineering, Georgia Tech

Experience

6 years

Affiliations

Urban Land Institute

American Institute of Certified Planners

International Parking & Mobility Institute

Association for Commuter Transportation

Campus Parking and Transportation Association

**Denotes work completed at a previous firm.*

Jeremy is a seasoned mobility professional with a strong background in leading multi-faceted transportation strategies with a high-touch, client-centered style. His project management approach prioritizes innovation and collaboration, consistently delivering actionable results for institutional and private-sector clients. Jeremy's passion for mobility and transportation drives him to continuously seek effective solutions. He is known for his exceptional ability to engage with stakeholders and decision makers, presenting project recommendations with clarity and conviction.

Jeremy holds a bachelor's degree in Civil Engineering from Georgia Tech and two master's degrees in City Planning and Transportation Engineering from the same institute.

Prior to joining Walker, Jeremy held a leadership role at Kimley-Horn, where he successfully led institutional and private-sector parking strategies for clients nationwide. Prior to Kimley-Horn, he managed transportation assets and programs at the Coca Cola world headquarters in Atlanta, Georgia.

Project Highlights

- Kennesaw State University Campus Parking Study, Kennesaw, GA
- California State University Stanislaus, Turlock, CA
- Samford University Mixed Use Parking Study, Homewood, AL
- University of Akron Residence Hall Monetization Study, Akron, OH
- Midtown Alliance Bicycle Facility Assessment, Atlanta, GA
- City of Lansing Parking Study, Lansing, MI
- University of Texas at Austin East Campus Parking Study, Austin, TX*
- UC Davis Parking Mobility Study*
- Western Kentucky University Parking Permit Assessment*
- Loma Linda University Health Parking and Mobility Strategy, Loma Linda, CA*
- UAB Highlands Hospital Parking Study, Birmingham, AL*
- Vanderbilt University Parking and Mobility Strategy, Nashville, TN*

Victor Hill, CAPP, MPA

Mobility and Transportation Consultant

Victor Hill is part of Walker's Higher Education and Mobility Planning team and works with clients nationwide. Victor joined Walker in 2023 after more than ten years in the parking and transportation industry. He worked for seven years as director of parking and transportation services at the University of Wisconsin-La Crosse (UWL) and for over three years at T2 Systems, where he was an account manager and team lead. Victor led a complete overhaul of UWL's parking operation, notably its license plate recognition (LPR) deployment, and regularly consulted with universities in and outside the UW system. He managed accounts along the east coast, Midwest, and Canada for T2 Systems. He has delivered numerous presentations and articles about university operations and sustainability.

Key Experience

Technology-based solutions

Access and revenue control

Operations

Sustainability

Education

Master of Public Administration (Environmental Policy), Florida Gulf Coast University, Florida

Bachelor of Arts, Mass Communication, Winthrop University, South Carolina

Bachelor of Arts, English, Winthrop University, South Carolina

Affiliations

Association for Commuter Transportation (ACT)

International Parking and Mobility Institute (IPMI)

Experience

11 years

Publications

"Get to the Point: Linking Multimodal Connections," Parking and Mobility, February 2024

"Curb Management and Transit Equity," Parking and Mobility, October 2023

"Let's Not Talk About EVs," Parking & Mobility, September 2022

**Denotes work completed at a previous firm.*

Project Highlights

Parking Consultant for:

- University of Arizona
- University of Michigan
- Universities at Shady Grove
- University of Arkansas
- University of Miami
- Tulane University
- Stanford University
- Florida State University
- Boise State University
- Belmont University
- Kennesaw State University
- University of Wisconsin-Eau Claire*
- University of Wisconsin-Parkside*
- University of Wisconsin-Platteville*
- University of Wisconsin-River Falls*
- University of Wisconsin-Stevens Point*
- University of Wisconsin-Stout*

Karen Peris

Mobility and Parking Planner

Karen is a Mobility and Parking Planner in Walker's New York office, where she works almost exclusively with higher ed clients and that incorporate a wide range of studies including mobility and transportation master planning, parking planning, stakeholder engagement, peer benchmarking, transportation demand management strategies, ride sharing impacts, market analysis, and shared parking analysis. While Karen focuses on higher ed clients, she has had the privilege to work on projects that assist a variety of clients including municipalities, hospitals, developers, and casinos.

Karen works in Adobe Suite and ArcGIS to combine her analytical skills with a passion for cartography to deliver quality renditions of study results. She holds a Master of Science in Community and Regional Planning from the University of Texas at Austin where she focused on public and stakeholder engagement, comprehensive planning, and tactical urbanism.

Key Experience

Parking Supply/Demand

Alternatives and Site Analysis

Shared Parking

Community Concerns

Code Requirements

Site Constraints

TDM

Education

Master of Science, Community & Regional Planning, University of Texas at Austin, 2016

Bachelor of Arts, Political Science, Syracuse University, 2013

Experience

6 years

Affiliations

ACT Member

Technical Skills

ESRI ArcGIS

Statistical Package for the Social Sciences

Adobe Photoshop

Adobe Illustrator

Project Highlights

Clemson University Parking and Transportation Operations Analysis
Clemson, SC
Identified challenges and opportunities facing the campus's existing transportation and parking system, collected institutional data and stakeholder input, performed a data gap analysis, projected the parking supply/demand, analyzed traffic operations, assessed existing technology and hardware systems, provided a programmatic TDM assessment, formulated a detailed year-by-year 10-year pro-formas, and delivered findings and recommendations for continued growth and improvement.

Texas A&M University (TAMU) Transportation Mobility Plan
College Station, TX
Comprehensive transportation, parking, commuting, and transit program to meet and enhance the campus community's access and mobility needs. Services included a discovery phase with systems review, analysis, development plan, and future planning. 25-002502.00

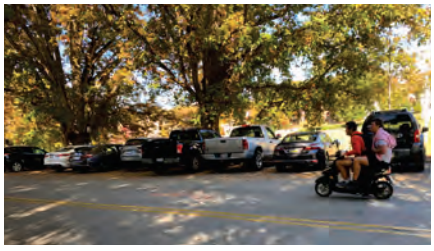
Marian University
Indianapolis, IN
Parking supply/demand and alternatives analysis, site feasibility analysis.

University of New Mexico Integrated Campus Plan (In progress)
Albuquerque, NM
Provided parking data and analysis as part of a team for the update pf the overall campus masterplan.

University of Missouri Health Parking & Transportation Study
Columbia, MO
Created parking demand scenarios to predict the parking and transportation needs of the planned expansion of the University Health campus.

Clemson University Comprehensive Operational Assessment

Clemson, South Carolina



Clemson University Parking and Transportation Services noted the increased demand for parking and the changing behaviors of users throughout the COVID-19 pandemic. Clemson, as a standard University practice, performs operational audits of units regularly. These audits, in part, shape how the department may grow and evolve with changing campus needs.

Walker observed, interviewed, and reviewed documents in order to understand the day-to-day operations of Parking and Transportation Services. This review and analysis allowed Walker to understand what is going well within the operations and how recommendations may be added to better the system. Walker recommended fully utilizing parking technologies to ease management and enforcement protocols. While a parking garage is inevitable, it is unlikely Clemson can build its way out of the growth anticipated—many recommendations were centered on transportation demand management (TDM) participation. Taking the recommendations, a step further, an implementation plan was created to allow a path forward.

Key Features

- As a standard University practice, Clemson performs operational audits regularly
- Without changes, Clemson's demand for parking is anticipated to outstrip its supply in the near future

Solutions Provided

- The financial analysis provided decision-making guidance regarding a path forward for Clemson's parking and transportation functions
- Walker recommended Clemson work with surrounding local and state governments to create a continuous flow of biking and pedestrian paths
- Walker outlined a matrix of options with cost estimates for Clemson to select the decided routes of implementation

Benefits

- This study indicated an immediate concern of parking supply—without addressing this issue from multiple angles, the University could have been in a much more challenging position
- Walker's implementation plan allows Clemson to prioritize changes based on institutional decisions and understand the costs and implications of doing so

Client Reference

Dan Hofmann, CAPP
Clemson University Parking and Transportation Services
G-01 Edgar Brown Union
Clemson, SC 29634
864.656.4132
hofmann@clemson.edu

Texas A&M University Transportation Mobility Master Plan

College Station, Texas

Client Reference

Debbie Lollar, MS, CAPP
Texas A&M University
Transportation Services
1250 TAMU
College Station, TX 77845
979.862.3478 | dlollar@tamu.edu

Texas A&M sought to address the immense growth facing the institution and the associated mobility issues anticipated through encouraging users to find modes outside of a single-occupant vehicle. Walker analyzed and assessed the entire transportation mobility framework utilizing rigorous public outreach that included an interactive project website, tabling sessions, a discussion forum, and breakout sessions both in person and online. Walker collected and analyzed data on vehicular, pedestrian, and other rolling movements on different parts of campus. Field tests were performed using traffic cones to temporarily alter the mobility landscape and study how users react and behave to the changes.

With this thorough review, we were able to understand and identify pinch points and access issues. Technical planning recommendations were developed that utilized tactical urbanism, transportation design principles, and creative demand mitigation strategies.

Key Features

- Texas A&M is experiencing incredible growth
- How would the institution accommodate growth while minimizing the need for real estate dedicated to vehicles?

Solutions Provided

- Walker performed field testing of potential future urban planning initiatives through the use of traffic cones
- Walker recommended a three-pronged approach to addressing parking: reallocating much of the demand to the west, reducing and mitigating demand overall, and building additional parking for certain users
- Walker recommended a rerouting of transit to accommodate the shift in users to remote parking locations in the west of campus
- Walker recommended Texas A&M implement designated vehicle pickup and drop-off locations at key access points for both the campus community and transportation network companies (TNCs or ride-hailing services)

Benefits

- These solutions allow for the institution to accommodate the growth anticipated while taking steps to mitigate parking demand
- Walkers tactical planning recommendations increase the quality of life for faculty, staff, and students with an increase in cycling infrastructure, parklets, and shaded walking options

Emory University Parking Permits

Atlanta, Georgia

Walker Consultants has worked with Emory University on a variety of parking, transportation, and restoration projects since 2007. Walker was engaged with the University on a parking equipment upgrade project when the COVID-19 pandemic began, resulting in a sudden change in parking demand. Walker worked with Emory to use this equipment upgrade as an opportunity to evaluate its permit system and introduce new flexibility for its customers, both during and after the pandemic.

Key Features

- The University previously sold long-term parking permits, which were relatively simple to manage, but had several downsides. Pre-paying for an entire semester of parking encouraged single-occupancy vehicle trips and congestion on campus, working against the University's environmental and sustainability goals
- For customers, the cost of long-term permits could be prohibitive, and the available locations less than ideal. With the pandemic resulting in many employees and students only visiting campus occasionally, long-term permits were no longer ideal for some customers

Solutions Provided

- Walker worked with Emory to switch from long-term permits to daily parking decisions
- Parking privileges were also temporarily revamped to allow employees and students to park closer to their destination, reducing demand on the University's shuttle system, which was operating with limited capacity during the pandemic
- The decision to switch was made only two months before the beginning of the semester, and Walker worked with the University to set up the new program in only six weeks

Benefits

- Emory is now prepared with the tools and structures it needs to further adapt its parking permit system as demand evolves after the pandemic
- While no plans have yet been made, there will be opportunities for the University to strategically set pricing and privileges to distribute parking demand evenly through the system, improve the customer experience, and encourage use of shuttles, carpools, and transit
- In the long term, this flexibility can also help the University ensure its parking system remains self-supporting

Client Reference

Adele Clements, MPA
Senior Director of Transportation & Parking Services
1945 Starvine Way, Suite 400A, Decatur, GA 30033
404.727.3104 | adele.clements@emory.edu

University of Arizona Mobility Master Plan

Tucson, Arizona

Walker Consultants collaborated with the University of Arizona as a subconsultant to Ayers Saint Gross Architects and Planners to conduct a comprehensive operational assessment of its parking and transportation programs and to create a Mobility Plan. The resulting Mobility Plan created a practical, visionary, and implementable strategy to improve Parking and Transportation Services' ("PATS") support for the campus' changing landscape, growth, and evolution. The plan has been recently submitted for the University's review.

Key Features

- The University needed guidance on how to use its existing facilities and resources more efficiently to maximize the investments it has already made. This includes distributing mobility demand more evenly throughout the system and understanding the impacts of future growth on the parking and transportation system.

Solutions Provided

- Policy and procedure recommendations to enhance campus connectivity, reduce vehicular circulation and congestion, and promote a park-once philosophy.
- Best practices consulting to decrease overall parking demand by aiding the University in developing, customizing, implementing, measuring, and fine-tuning transportation demand management (TDM) strategies.
- Ten-year demand, inventory, and financial projections to gain insights into the future of the parking system.

Benefits

- The proposed plan balances parking supply and demand and encourages alternatives to single-occupant vehicles, affording greater priority to pedestrians, bicyclists, micromobility users, transit riders, people with disabilities, and making the campus more connected and livable.

University of Iowa Parking Master Plan

Iowa City, Iowa

Walker was selected to assess and make recommendations to the University of Iowa's parking and transportation systems. This project entailed a comprehensive review of the the Parking and Transportation Department, including stakeholder input, parking supply and demand projections, financial analysis and projections, organizational assessment, transportation demand management (TDM) assessment, curb management and smart mobility assessments, alternatives analysis, and recommendations on all aspects. Walker's experience in working with higher educational institutions provided a foundation for the recommendations that could enhance revenues while providing a more predictable and enjoyable experience for users of the transportation system. The result of the study is a plan, designed to facilitate not only parking, but movement to, from, and around campus for pedestrians, cyclists, transit riders, and motorists, now and into the future—in ways that are environmentally and financially sustainable.

Key Features

- University of Iowa Hospitals and Clinics and the football stadium are both located in the heart of campus adding to the demand and congestion on a busy campus
- Walker identified that hundreds of users were on wait lists, and have been for years, to gain access to their favorite parking location, creating false hopes and adding to user frustrations

Solutions Provided

- Walker recommend the full integration of license plate recognition (LPR) technology, which may allow for staff to flex where they park depending on the time of day and day of the week
- Walker's financial assessment indicates that there would likely be substantial opportunities to expand and enhance TDM programs

Benefits

- The University's Transportation Department is able to see a plan forward that meets their goals of financial and environmental sustainability
- The judicious replacement of parking structures that have reached the ends of their useful lives mean the campus will not enter a period of strain to the transportation system

University of Missouri Parking and Transportation Master Plan

Columbia, Missouri

Walker was engaged by the University of Missouri to develop a parking and transportation master plan to serve as a roadmap to help guide future parking and transportation decision making.

Key Features

- Engage the campus community through a survey, focus groups, committee meetings, and an open forum
- Optimize MU's parking and transportation system, which includes 26,000 parking spaces
- Employ holistic access planning, as opposed to simply building more parking
- Recommend customer service enhancements and operational efficiencies

Solutions Provided

- Pursue specific enhancements to operations, equipment, and procedures to streamline administration and improve customer service
- Expand and improve access to alternative transportation modes
- Better differentiate parking rates to distribute demand more evenly
- Build a financial pro forma to support parking and transportation programs, as well as ongoing and deferred maintenance
- Assure operational transparency and provide clear communications and informative marketing materials to MU campus community

Benefits

- Increase revenues for improved services and capital infrastructure needs
- More efficient use of existing parking resources
- Delay or avoid the necessity of building additional parking structures
- Linking parking and transportation to campus sustainability goals

04

Operations and Ability to Perform

Operation Plan

Project Approach

Walker proposes the work in three phases. We do this to put the deliverables into context, and to present a cost proposal that is more clearly defined by task. Our three-phase process for the Mississippi State University Parking Study is as follows, with each phase building upon and being informed by the previous.

Phase 1

Discovery and Diagnosis: In the first phase, we will develop an understanding of the challenges and opportunities facing the transportation and parking system at Mississippi State University (MSU). This phase is both quantitative and qualitative in nature, including data collected from MSU, peer institution data, and stakeholder input. While requiring analysis and interpretation, the process and deliverables in Phase 1 are entirely objective.

Phase 2

Findings, Conclusions, Projections, and Recommendations: In the second phase, we will interpret the data collected and analyzed in Phase 1 and apply industry standards and professional judgment to produce an initial set of recommendations to be vetted by the University. After identifying the recommendations that MSU is interested in pursuing, Walker will produce a Phase 3 implementation plan that is both realistic and visionary.

Phase 3

Implementation Plan: Expanding upon the MSU and peer institution data collected in Phase 1, and upon the findings and conclusions from Phase 2, Phase 3 will present recommendations and strategies that build upon MSU's existing successes and core competencies and offer opportunities for growth and continual improvement. Walker's recommendations will be designed to be consistent with university preferences, culture, and objectives; to be implementable and feasible; to have a clear cost/benefit analysis; and, to show a clear path forward, including a transparent description of which recommendations are standalone and which have other recommendations as prerequisites.

Final Presentation(s), if Desired: Walker will present to the project team and/or other campus groups in an in-person or virtual environment, as desired by the University.

Ongoing Project Elements

Project Management and Coordination

Walker will integrate project management, coordination, and engagement throughout our work on the parking study, as these elements are foundational to a successful project. We will work closely with MSU project personnel and other campus stakeholders to shape, refine, and execute these processes, ensuring that we engage with the right groups on campus, maintain open lines of communication, meet project objectives, build the foundation for lasting changes in the campus mobility landscape, and maintain project schedule and benchmarks.

Close coordination with the internal project team is essential to reviewing progress, maintaining project efficiency and schedule, and ensuring desired outcomes. We will coordinate closely with the client project manager and the project management team throughout the project, with formal check-ins throughout its life.

Stakeholder Engagement

Stakeholder engagement will permeate our approach to the project; it will be critical to how we understand the campus and its challenges and opportunities, what potential future paths are possible, and what implementation of future scenarios looks like.

Walker will work closely with MSU personnel to shape and execute a comprehensive stakeholder engagement process. Our process will engage a variety of faculty, staff, and students—and other specifically identified key cohorts of the broader university community.

The primary goals of the stakeholder engagement effort will be to assess existing travel behaviors and patterns and their origins, evaluate the success of various options and interventions for changing such behaviors and patterns, and identify barriers to implementation. Stakeholder engagement will also be an essential component in ensuring that initiatives contribute to an equitable campus across university demographics. For example, stakeholders will help our team recognize price sensitivities, convenience and speed sensitivities, and the relationship between the lives of stakeholders off-campus and their travel patterns on campus. Each contact is an opportunity to solicit feedback and educate the campus community about the challenges and potential solutions. The outcome will be bodies of recommendations on which all campus constituencies can see their fingerprints—improving the chances that the changes and enhancements recommended can get adequate levels of community buy-in and support.

Each engagement session is an opportunity to educate important stakeholders about the project and its objectives and benefits, shape the project's outcome, and build support that will facilitate the eventual execution of project plans and enable a shift in how users travel to and around campus. Engagement sessions will be leveraged to establish a mutual understanding of the benefits of the project and how it impacts how individuals interact with the campus. Sessions will focus on understanding the specific barriers and challenges stakeholders face, and what programs, policies, or infrastructure are most likely to help stakeholders overcome these barriers and modify their commuting and travel behavior.

Stakeholder engagement during the project is a critical opportunity to introduce a new mobility future to the campus community, establishing brand identity and a shared understanding of the motivations and objectives of the program. This will enable the University to seamlessly pivot from the end of the project into implementation and ongoing management of the program and its initiatives.

In addition to in-person and virtual stakeholder meetings, Walker can also develop an optional campus-wide survey to be administered to all students, faculty, and staff. This instrument will measure campus commuter and parking behaviors, attitudes, and preferences—and will yield valuable quantitative and qualitative data that will help shape our recommendations for programmatic enhancements.

Scope of Services

Phase 1

Discovery and Diagnosis

The project will start with the Discovery and Diagnosis phase, in which we will build the foundation for the rest of the project work. During this phase, Walker will delve into all aspects of the existing mobility and parking ecosystem at the MSU, working to understand how things currently operate, and pursuing the following objectives:

- Develop a shared understanding of the mobility context of MSU and the goals and objectives of the project
- Review and assess existing programs, policies, and infrastructure
- Identify multimodal access and circulation challenges, and opportunities to develop potential solutions
- Understand the campus context around which future scenarios will be formulated
- Understand the baseline of and "take the pulse" on campus perceptions and opinions of campus access and mobility, through stakeholder engagement
- Build the foundation for sustained change in the mobility system

Key aspects will include a kick-off meeting, request for information (RFI), peer benchmarking, campus observations, an operational audit, and in-person and virtual stakeholder engagement (meetings, interviews, and/or focus groups).

The RFI will request baseline data to inform the rest of the project, including (but not limited to):

- Parking permit sales data
- Campus populations
- University population projections
- Employee and student home locations
- Financial data
- Parking inventory and occupancy data
- Policies and procedures
- Organizational structure
- Parking fees and fines (current and historical)
- Inventory of parking systems, infrastructure, and equipment
- Campus development plans, and
- Deferred maintenance backlog (if any)

1.1 Review of Policy and Program Context and Framework

As with any planning project, understanding the past, present, and future planning context is critical to generating an outcome consistent with, and that builds upon, the successes of past work, and leverages opportunities associated with current and future planning work. Understanding what has been planned and what efforts overlap with this undertaking will aid in executing a successful project that leads to lasting impact.

The Walker team will review closely the 2022 Campus Plan, the 2023 Regional Transportation Plan, and other relevant planning documents to strategize and develop alignment, where necessary. Moreover, we will collect and review data to understand the parking and transportation context of the greater area within which the university resides.

1.2 Parking Management Strategy: System Assessment

Parking Operations Audit

Walker will review the parking operation with an eye toward embracing best management practices employed by other universities and making the parking enterprise the best it can be. Walker will assess the transportation and parking policies and operational practices at MSU. Special attention will be given to:

- Campus parking rules and regulations including pricing strategies
- Organization and staffing
- Permit allocation strategies and methodologies
- Enforcement practices
- Integration of parking with other travel options
- Effective use of systems and technology
- Administrative policies and standard operating procedures
- Revenues and expenditures
- Citation and appeals procedures
- Parking agreements and arrangements

Parking Inventory and Occupancy Study

Walker will conduct a comprehensive parking data collection effort to assess the current utilization of the system.

Tasks

1. Perform a physical survey of existing parking assets, including all existing parking and associated elements. This entails counting and validating the parking inventory and recording the space-type/use of each space in each lot.
2. The inventory shall include all on-street and off-street surface and structured parking facilities. Findings will be compared in the field to the inventory provided by the MSU.
3. Perform parking occupancy counts for all parking supply located on campus. Fieldwork will occur during two weekdays representing typical peak usage (with two counts on each day, centering on 10:00 a.m. and 2:00 p.m.).
4. Walker will have four staff on-site. The University agrees to partner one MSU staff member with each Walker staff member. Ideally, these four teams of two will conduct inventory together on one day and two occupancy counts together on the next two days; this staffing model is beneficial to the methodology enumerated below. NOTE: This is most effective if the same pairings are kept intact for the entirety of all three days of fieldwork.

Methodology

The following methodology will be used collect field data on parking inventory and occupancy in the following manner:

1. On day one, the four Walker/MSU teams will undertake the parking inventory. It is anticipated that this will take up to four to six hours to complete.
    a. Each Walker/MSU team will have a fixed "zone" (set of facilities) to count on campus throughout the whole inventory/occupancy process. This will increase familiarity, speed, accuracy, and efficiency.
    b. Inventory can be taken at any time throughout the day
    c. Inventory shall be highly detailed such that the designation of every space in every facility is noted.
    d. Inventories will be compared and contrasted with any existing MSU parking inventories. Discrepancies will be noted and verified—resulting in a validated inventory for the occupancy counts
2. On day two, the four Walker/MSU teams will undertake the parking occupancy counts of all parking facilities in the study area. This assumes that MSU will identify the anticipated "peak" day based on class schedules (typically either a Tuesday or Wednesday). Walker can collect two days of occupancy counts if desired by MSU.
    a. Depending on the zone, it may be more efficient to conduct occupancy counts using a rental car (provided by Walker), a golfcart or similar small vehicle (provided by MSU), or on foot. This will be determined on or prior to the day on which inventory is measured.
    b. Counts of the spaces will be taken two times. Once centering on 10:00 a.m., the other time centering on 2:00 p.m.
    c. Because of the size of each "zone," it is anticipated that each count will take 60-75 minutes. Counts will begin approximately 30 minutes prior to 10:00 a.m. and 2:00 p.m. and with the intention of ending approximately 30 minutes past those hours. Counts tend to become more efficient with repetition and the times will be adjusted accordingly. The goal is to take a "snapshot" of demand in as short a window as practical.
    d. The route taken for each count shall be similar for all subsequent counts.
    e. Counts will use the inventories validated on the previous day; the occupancies of each space type in each lot will be recorded.

1.3 Transportation Demand Management Strategy: Foundational Assessment

Formulate the Problem Statement

We will meet with MSU personnel at the kick-off meeting to discuss the role of transportation demand management (TDM) in the current parking and transportation program, identify aspirations for the TDM program moving forward as it relates to the reduction of parking demand, increase accessibility options to students and staff, and management of an integrated and coordinated transportation and parking program at MSU.

The purpose of this meeting will be to develop a problem statement for the TDM program and identify the role of TDM in the day-to-day management of the transportation and parking program.

The Walker team will complement kickoff meeting discussions with field observations, over a period of three days during the first on-campus visit, to document access conditions, travel patterns, utilization, infrastructure, hotspots, and user behavior for all alternative mobility modes, including walking, biking, transit, carpooling/ vanpooling, taxi/ transportation network companies (e.g., Uber and Lyft), and scooters.

These observations and discussions will ensure that current and projected future headcounts and parking supply

and demand models are updated to reflect the most recent information to best inform the transportation demand management effort. This analysis will help inform the TDM program parking demand reduction targets and potential cost savings.

Identify Issues and Opportunities

We will analyze all existing TDM programs and transportation options currently in operation at MSU, including transit service, marketing and promotion activities, and the staffing and organizational structure to manage and deliver TDM programs.

The purpose of this analysis is to develop a comprehensive picture of the mobility landscape in the city and campus, and how new technology and smart mobility modes are impacting or have impacted the existing landscape.

We will request and analyze all available information for each element of the existing TDM program to document the extent of the program, cost, utilization, and return. Walker will include questions about TDM during focus groups to develop a more complete understanding of the university community experience, attitudes, and preferences about transportation and parking, especially as they relate to using parking pricing and incentives to influence user behavior. Focus groups will be designed to obtain impressions from different user groups (e.g., transit users or bike commuters) to provide qualitative information that can augment the quantitative data provided by the University. The same methodology applied to the focus groups will be built into a survey, should the University choose to use one to solicit additional input.

Walker will analyze all mobility options available to access and move around the MSU campus, identifying service modes and service providers, as well as all service modes that provide direct service to the campus, including levels of service, hours of operation, fares, infrastructure, and amenities. Walker will complement the mobility landscape review with an analysis of accessibility to alternative mobility options. This will consist of mapping the home location of all university employees (staff and faculty), all known student housing properties outside campus, and measuring their proximity to transportation services and access options. Our assessment of existing conditions will include a review of existing transit services. We will examine ways in which bicycles, and shared micro-mobility devices can integrate with the existing Starkville MSU Area Rapid Transit (S.M.A.R.T) system, provide important first mile/last-mile connectivity, and promote the campus experience.

1.4 Stakeholder Engagement

In partnership with the University, Walker will identify key stakeholders and obtain feedback in a series of interviews, meetings, and focus groups. This qualitative data adds the “color commentary” to the “play-by-play” provided by the data gathered through the campus survey and Walker’s RFI. It puts names, faces, and stories—individual experiences—with access, mobility, transportation, parking, and commuting. This helps capture and envision what it takes to get to, from, and throughout campus on a day-to-day basis. While single anecdotes will not lead directly to recommendations, hearing individual experiences and points of view lends a third dimension to the reams of data that we will study, analyze, synthesize, and impact the deliverables.

Some examples of stakeholder groups may include undergraduate residential students, undergraduate commuters, graduate and professional students, researchers, staff, faculty, administrators, senior leadership, campus governance groups, athletics and events representatives, sustainability groups, people with disabilities, admissions, development, marketing and communication, and others.

We anticipate conducting consolidated stakeholder engagement throughout a second site visit and working with MSU to determine the preferred groups and methods used. Walker is committed to adapting its project parameters to meet MSU’s needs, however, and can adjust the stakeholder engagement activities as desired.

Campus Survey (Optional Additional Service)

Walker will develop and issue a campus survey in coordination with MSU leadership. The survey will help engage all campus users and allow as many opinions as possible to be documented. This type of engagement will augment the information provided at a department level, strengthening the effectiveness of the exercise. A web-based survey will be built in Qualtrics and administered in partnership with MSU. The campus survey intends to ascertain information from students, faculty, and staff about their commuting patterns, interaction with the parking and transportation system, level of satisfaction with different aspects of the system, identified challenges or concerns, and suggestions for improvement. Walker will summarize survey responses in a digestible format and make inferences about feedback trends and opportunities to enhance operations to support the needs of the MSU community.

1.5 Peer Review

Using the MSU-provided list of peer institutions, we will document how similar campuses operate and charge for parking. Walker will undertake web research and, when necessary, conduct phone interviews with peers, collect peer parking and transportation data, and summarize findings and trends. The data will be customized to capture information most useful to parking and transportation needs and issues facing MSU.

Walker has conducted over 100 university campus parking studies in recent years and maintains relationships through our emphasis on client service. MSU-identified peers that Walker has worked with recently include:

- Texas A&M University
- Clemson University
- University of Arkansas
- University of Georgia

Phase 1 Deliverables

- Kick-off agenda (virtual meeting)
- Request for information (RFI)
- Campus Visit #1 – data collection
- Campus Visit #2 – stakeholder engagement
- Phase 1 report—Current conditions:
    - Summary benchmarking data
    - Parking inventory/occupancy study
    - Stakeholder interview and focus group summaries
    - Campus survey summary (if included)
    - Operations audit
    - Financial analysis

Phase 2

Findings, Conclusions, Projections, and Recommendations

While Phase 1 provides an encyclopedic context and baseline for the study, it is entirely objective, and focuses on current conditions. In Phase 2, Walker will provide rigorous analysis and apply the knowledge and experience gained through dozens of similar projects. During this phase, we will build on the learnings of Phase 1 to begin to project and formulate the path forward in achieving the MSU's access, connectivity, and mobility goals. Phase 2 will include the following elements:

- Document data collected and currently available; identify additional data that should be collected and/or queries that should be designed, in order to better measure key performance indicators
- Consideration of future campus changes, travel patterns, and mobility needs. This step includes projecting campus parking demand over a ten-year planning horizon
- Development and refinement of parking and mobility scenarios that respond to identified needs and opportunities, and work to achieve stated goals and objectives
- Create financial models for various alternative futures
- Coalescing around preferred program, policy, and infrastructure solutions for all modes of campus travel.

Our approach is outlined as follows:

2.1 Future Demand Forecasting

Using the data collected in Phase 1, the Phase 2 exercise analyzes campus parking supply and demand patterns and builds a model of the current system.

We will review campus construction currently underway or planned for the next ten-year period that may impact future parking supply and/or demand. This includes population projections and planned changes in the campus' nodes of demand, as the "center of gravity" of the campus may continue to shift and evolve.

Based on data provided and collected, the Walker team will establish a parking demand model that will be used to determine present and future parking adequacy for MSU's parking system. Parking adequacy will be presented in terms of parking space surpluses or deficits by user groups and/or parking areas.

We anticipate providing a future parking adequacy model that illustrates a ten-year planning horizon, presenting short- and long-term impacts. This "status quo" model will be used as a basis to present the cost-benefit ratios of different operational, TDM, transit, micro transit, and walking/cycling scenarios.

2.2 Parking Management Strategy: Scenario Development

Informed by Walker's review of current parking management practices and policies and guided by feedback from the campus community and peer institutions, Walker will develop management scenarios to support the desired future of the MSU campus. The management scenarios will consider the anticipated supply and demand challenges facing the campus, as well as the identified operational goals of the Transportation Services group.

Walker will develop a list of potential operational interventions to be socialized with MSU leadership. Some interventions will be "must haves" that directly respond to important needs of the community, while others will be "nice to haves" that may improve operations but are not a necessity. Walker will consider the opportunities for creative revenue generation or phased roll-out of the operational scenarios and use the financial model to test various operational models and estimate the financial impact of each intervention.

Potential management interventions may include but are not limited to:

- Strategically located additional parking infrastructure
- Increased permit fees
- Adjustments to parking allocation and permit permissions
- Permit issuance process changes
- Internal staffing revisions
- Increased daily parking options
- Procurement of new technology
- Adjustment to appeals and adjudication processes

The scenario testing intends to identify a list of preferred operational interventions that can be consolidated into a cohesive strategy for MSU to implement in the future, while maintaining a receipt-supported enterprise, prioritizing the user experience, and appropriately maintaining their assets.

2.3 Transportation Demand Management Strategy: Refinement

Goals and Objectives

Walker will analyze the program data collected and the observations made during Phase 1, and will develop TDM program goals and design principles, including a commute mode share target. This mode share target will identify the desired scale and timeline for SOV reduction. Walker will meet with the client to review the analysis and findings from field observations, mobility options analysis, and survey (if included) and focus group efforts. The purpose of the meeting will be to discuss findings and takeaways and use this knowledge to identify goals and objectives for a new TDM program. Program goals and objectives may include improvement of staff, faculty, and student experiences, furthering of university core values, and commitment to sustainability and action against climate change; as well as a clear business case for investing in access and mobility programs.

Strategy Development and Evaluation

Goals and objectives will be used to establish program design principles and priorities. For instance, a design principle may be to introduce equity in access to transportation options and in dollar amounts of investment and subsidy of transportation options.

Design principles and priorities will provide the strategic approach that will guide development of TDM program measures in parking, modal incentives and service delivery, transportation system amenities and infrastructure, as well as education, promotion, and rewards.

Walker will establish concept-level TDM program scenarios for modeling, including policy, parking management, mobility programs, and communications measures that support use of alternative mobility options, and reduction in single-occupant vehicle travel and demand for parking.

Walker will share TDM program scenario packages with the MSU project team to define specific targets for parking demand reduction and alternative mobility mode share. The Walker team, in concert with MSU, will select a TDM program package for further development to estimate probable costs of implementation and impacts in Phase 3.

Establishing the Business Case

Leveraging current and projected future parking and mode share data, Walker will model the cost-benefit of up to two TDM scenario packages to establish the financial viability and assess the benefits of implementing a TDM program relative to the cost of building and managing parking (if applicable). The goal of this task is to articulate the financial implications of implementing an enhanced TDM program at MSU.

2.4 Fiscal Stability

Walker will build on the baseline parking and transportation system financial model developed in Phase 1 to incorporate future conditions and scenarios. We will highlight the alternative financial futures that MSU can expect through the development of three proforma statements covering net operating income, debt service coverage, and operating expenses for the transportation and parking system for a ten-year period. The three proformas statements will include:

- **Baseline Model:** Maintaining the operational status quo and considering campus growth projections
- **Supply Side Intervention Model:** Using parking infrastructure to solve a potential parking deficit
- **Demand Side Intervention Model:** Using operational practices and TDM programs to manage parking demand rather than constructing new parking

The financial scenarios outlined represent potential outcomes at different ends of the spectrum and will be informed by the growth assumptions and future demand forecasts. These models will be used to illustrate the tradeoffs associated with different approaches to managing campus growth. Socialization and discussion with the MSU team will inform a blended solution to be represented in the final deliverable.

Phase 2 Deliverables

- Parking supply/demand projections
- Parking management scenarios
- Transportation demand management (TDM) programmatic assessment
- 10-year proforma statements
- Consolidated Phase 1 and 2 report

Phase 3

Implementation Plan

Expanding upon the MSU and peer institution data collected in Phase 1, and upon the findings and conclusions from Phase 2, Phase 3 is envisioned as a companion piece to the Phase 1 and 2 consolidated report. It will present recommendations and strategies that build upon MSU's existing successes and core competencies and offer opportunities for growth and continual improvement. The Phase 3 report will be developed after Walker's receipt of MSU's review of the recommendations in the Phase 1 and 2 consolidated reports. As such, the recommendations will be designed to be consistent with University preferences, culture, and objectives; to be implementable and feasible; to have a clear cost/benefit analysis; and, to show a clear path forward, including a transparent description of which recommendations are standalone and which have other recommendations as prerequisites.

3.1 Parking Management Strategy: System Recommendations

Drawing from the assessment in Phase 1, and the findings and conclusions from Phase 2, the Walker team will offer prioritized recommendations for improving parking management practices and pricing schemes to improve overall operations and have parking management better support MSU's goals and objectives.

Walker will make recommendations related to parking fees, pricing tiers, and parking permit allocation strategies. The overall objectives will be keeping Transportation at MSU solvent, covering all operating expenses, debt service, and programmatic elements, and setting aside a sinking fund for preventative and routine maintenance.

The team will look for ways to distribute demand more evenly across all MSU's parking facilities and to balance the use of single-occupancy vehicle parking with TDM alternatives.

Tools might include adjusting parking pricing to reflect the value of parking (as determined by demand patterns) and/or suggesting allocation strategies to reduce congestion in individual parking facilities. Related to allocation strategies are the assignment of privileges to support a "park-once" philosophy to enhance safety by reducing traffic, congestion, and pedestrian/cyclist/vehicle conflicts.

3.2 Transportation Demand Management Strategy: Playbook

Creating a Path Forward

Building upon the work from Phase 1, and the TDM scenarios developed in Phase 2, the Walker team will develop a draft TDM playbook in response to MSU's review of the Phase 2 recommendations. The playbook will include suggested infrastructure, policy, parking management, mobility programs, and communications measures that support the use of alternative mobility options and reductions in single-occupant vehicle travel and demand for parking. The framework will include a year-by-year framework for implementing the TDM program. The implementation plan will be broken down into phases with documentation of action steps necessary to implement each recommended change.

Program packages will include descriptions of TDM measures, costs of implementation, performance metrics, and expected impacts. TDM program measures will be packaged according to desired outcomes and strategic directions, such as generating high performance and parking demand reduction impacts, providing support to parking management goals, or others.

The plan will contain the following phases of implementation:

- Quick wins – Next three months. Immediate, easy to communicate and understand changes.
- Short-term – three to 12 months
- Mid-term – 12 to 24 months
- Long-term – 24 months or more

The preferred approach will provide the basis for the development of the final TDM program and access and mobility plan. The playbook and implementation will include recommendations for long-term program management (including staffing considerations) and performance monitoring.

Phase 3 Deliverables

- Phase 3 DRAFT Report:
    - Organizational recommendations
    - Parking designation, fee, and allocation strategy recommendations
    - Parking fine recommendations
    - Operational and enforcement policy recommendations
    - Recommended transportation demand management (TDM) strategies and improvements
    - A phased implementation plan, with short-, medium-, and long-term strategies: this will be roadmap specifying critical decision points, staffing requirements, and financial implications
    - A 10-year pro forma, reflecting the preferred strategies and implementation timelines

- Phase 3 FINAL Report:
  - Walker will incorporate a consolidated set of MSU feedback and approvals to finalize the draft operational plan.
- Final Presentation(s), if desired:
  - Walker will present to the project team and/or other campus groups in an in-person or virtual environment, as desired by the University.

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