

Transportation Services Mobility Plan Update

October 5, 2022

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Agenda



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RFP Scope & Objectives





Scope

TEXAS A&M UNIVERSITY

Transportation Services

Mobility analysis includes:

- Engagement
- Transit and Microtransit
- Cycling and Walking
- Placemaking, Micromobility, and Curb Management
- Transportation Demand Management (TDM)
- Parking Demand



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Texas A&M University College Station, TX July 2022

WALKER CONSULTANTS





Objectives

- Right-size transportation options based on anticipated future demand (postpandemic future)
- Allow for a variety of feasible mobility options for all users
- Encourage faculty and staff to use modes outside of singleoccupant vehicles
- Improve access and decrease congestion
- Support financial stability of auxiliary

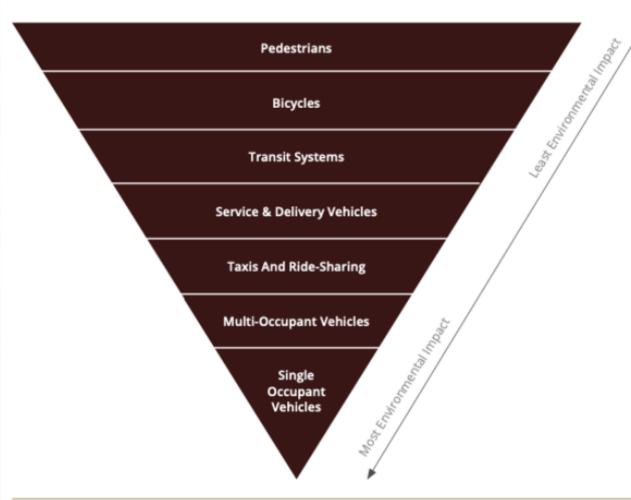


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Guiding Principles

Figure 31: Transportation Mode Hierarchy



Alignment with 2017 Campus Master Plan

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Mobility Plan Hierarchy



Stakeholder 2 Engagement





Stakeholder Engagement Highlights

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≻Safety –

- o Dangerous interactions amongst vehicles, buses, bicycles and pedestrians
- $\,\circ\,$ Bikes using sidewalks instead of the roadway
- o High traffic volumes on perimeter roads
- Through traffic connections that lead to congestion and a large number of conflict points with pedestrians and bicyclists

≻Infrastructure –

- o Inadequate design and maintenance of facilities
- Roads, pathways, sidewalk surface conditions, lack of signalized intersections, and inadequate bicycle/pedestrian crossing controls
- Gene Stallings Boulevard and Stallings Garage –conflict points due to large traffic volumes of vehicles, pedestrians and bicycles

≻Transit –

- $\,\circ\,$ Overcrowding and wait time for buses
- Inadequate number of buses on routes, providing service that is too infrequent and overcrowding on popular routes with crushing loads on buses
- Poor maintenance of buses



5 Outcomes





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Implementation Plan

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- Implementation Framework
- Potential costs and impacts by project type
- Cost by timeframe and funding type
- Potential costs by project type and timeframe
- Potential costs by priority and timeframe



Implementation Plan

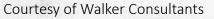




Figure 147: Potential costs and impacts by project type

Projected Costs and Impact by Type	Total Cost	Max. Daily Users	Max. Spaces Saved	Avg. Daily Users	Costs/User/Year
1. Transit Service	\$9,329,000	1,670	2,090	1,414	\$660
2. Walking Improvements	\$3,410,000	350	440	320	\$1,070
3. Biking Improvements	\$1,725,000	300	380	280	\$620
4. Vehicle Traffic	\$590,000	-	-	-	-
5. Carpool & Vanpooling	\$688,000	130	160	125	\$550
6. TDM Support	\$8,618,000	1,950	2,440	1,338	\$640
Grand Total	\$24,360,000	4,400	5,510	3,476	\$700

IMPLEMENTATION PLAN NARRATIVE

Transit Service

Itom	Transit Service Change Initiatives	Short-Term	Mid-Term	Long-Term
item		(1-3 years)	(4-6 years)	(7-10 years)
	Ross Street Bus Hub			
1	Eliminate bus traffic on Ross Street between Ireland and Bizzell Streets by re-routing Routes 01 Bonfire and 04 Gig Em. Re-route of buses and addition of two bus shelters and signs on Ross Street. Create a bus hub on Ross Street between Asbury and Ireland Streets, similar to the bus hub at Trigon. Reversing operation of buses on Asbury and Ireland to loop in the counterclockwise direction. This will improve turning movements on Ross Street and place bus stops away from the Power Plant and closer to northside campus destinations.	High Priority		
	Asbury Street Bus Lane			
2	Reverse operation of Asbury Street from NB to SB traffic. Keep exit lanes from North Side garage between New Street and University Drive. Restriping of traffic lanes.	Low Priority		
3	Addition of bus-only lane (1,000 feet painted lane and stenciling) on west side of Asbury Street.	Medium Priority		
4	Change orientation of angle parking spaces (31 spaces) on west side of Asbury (to point south) to allow access from SB traffic lane next to bus lane (vehicles would cross bus lane to park).	Low Priority		
	Ireland Street Bus Lane			
5	Reverse operation of Ireland Street from SB to NB traffic. Keep vehicle access to North Side garage as contraflow lane between University Drive and New Street.	Low Priority		

ltem	Transit Service Change Initiatives	Short-Term	Mid-Term	Long-Term
ntem		(1-3 years)	(4-6 years)	(7-10 years)
6	Add NB bus lane to middle lane of Ireland Street (1,000 feet painted lane and stenciling).	Medium Priority		
7	Add NB bike lane to east side of street (1,000 feet painted lane and stenciling) to connect with bike lane across University Drive. No impacts to vehicle and motorcycle parking on east side of street.	Low Priority		
8	Make New Street one-way WB traffic for vehicles and two-way traffic for bicycles (500 feet restriping and stenciling).	Low Priority		
	Campus Transit Service Increases			
9a	Add 1 vehicle to Route 01 Bonfire to increase frequency and carrying capacity during peak times.	High Priority	High Priority	High Priority
9b	Add 1 vehicle to Route 04 Gig Em and extend the route to follow alignment of Route 01 to provide additional capacity on the corridor during peak times, and additional connections to northeast side of campus.	High Priority	High Priority	High Priority
9c	Add 1 vehicle to Route 05 Bush School to reduce waiting times at the Fan Field Lot and increase frequency of service between Research Park and MSC.	High Priority	High Priority	High Priority
	Off-Campus Transit Service Recommendations			
10	Add 1 vehicle to Routes 15 Old Army, 31 E-Walk, 35 Hullaballoo, and 36 Cotton Bowl, during the peak hour, to increase carrying capacity and reduce crash loads.	High Priority	High Priority	High Priority
11	Startup a microtransit service that provides flexible on-demand service to campus from neighborhoods south of Rock Prairie Road in the City of College Station. Try out the service with a minimum of 3 vehicles during peak hours and 2 vehicles at off peak hours.		High Priority	High Priority

Walking Recommendations

		Short-Term	Mid-Term	Long-Term
Item	Walking Improvement Initiatives	(1-3 years)	(4-6 years)	(7-10 years)
	Military Walk @ Rudder Plaza			
12	Add direct pedestrian path between Military Walk and Rudder Plaza—to separate pedestrian flows and eliminate conflict with bike flows connecting between Trigon and MSC. Direct diagonal walking path (150 feet) between Military Walk and Rudder Plaza.	Medium Priority		
13	Redesign entrance to Rudder Plaza—move stage to Rudder Fountain, and redesign landscaped areas.	Medium Priority		
14	Change pavement pattern bordering new bike path (connecting Trigon and MSC) at Rudder Plaza to provide visual and sensorial warning to cross bike lane. 12,500 sq. ft. of new pavement (175 x 75 feet).	Medium Priority		
	Lot 19 Pedestrian Plaza			
15	Raise Lot 19 and convert it into a curb less plaza—no reductions in parking, to provide seamless path for pedestrians between MSC/Trigon and Evans Library. 15,000 sq. ft. of new pavement.	Medium Priority		
16	Add trees (2) to screen parking lot and pavement markings (320 feet) to delineate bicycle path through lot—connecting Trigon with Ross Street and Sbisa Hall/Asbury Street.	Medium Priority		
17	Add a double-arm gate to control vehicle access and bollards (20) to delineate shared path—vehicles and bikes.	Medium Priority		
	Ross Street			
18	Raise pedestrian crossing (widen existing raised crossing) at Military Walk to provide a level crossing for both pedestrians and bicyclists. Most pedestrians are walking on the "wheels route" that has more shade. About 800 sq. ft. of new pavement.	Low Priority		

11		Short-Term	Short-Term Mid-Term	Long-Term
ltem	Walking Improvement Initiatives	(1-3 years)	(4-6 years)	(7-10 years)
19	Relocate vehicle gate at Ross/Asbury to Asbury Street, and vehicle gate at Ross/Ireland to Ireland Street, to control access between 7:00 a.m. and 6:00 p.m. Permit access to TAMU service vehicles and buses at all times. One-way (eastbound) traffic for buses between Houston and Ireland.	Low Priority		
20	Pedestrianize Ross Street between Sbisa Hall/Fish Pond and Ireland Street—extend pavement treatment and design that is provided between Ireland and Spence Streets. 25,000 sq. ft. of new pavement (1,000 x 25 feet).		Medium Priority	
21	Use tactical urbanism elements such as planters to reduce width of carriageway on Ross Street between Ireland and Spence (about 80 planters to cover 800 – 1,000 feet). Provide a carriageway between planters of 12-16 feet and allow sidewalk traffic to overflow onto street between planters and curb (4-6 feet) to accommodate heavy pedestrian traffic during class changes. Divert all bus traffic to University Drive. Operate carriage way as one-way (westbound) for motorized vehicles and two-way for bikes and golf cart vehicles.	Low Priority		
	Spence Street			
22	Pedestrianize Spence Street between Ross Street and the Anthropology Building. Raise the street to create a curb less street and plaza environment. About 8,000 sq. ft of new pavement (320 x 24 feet).		Medium Priority	
23	Add shared path pavement markings—pedestrians, bicyclists and vehicles, and bollards (30) to channel vehicle traffic to Lot 23 parking.		Low Priority	
24	Add trees (2-4), planters, benches, and a pavilion to screen Lot 23 and create a plaza connecting with the Architecture Building.			Low Priority
	Evans Library Landscaping			
25	Improve landscape of walkway between Evans Library and Anthropology Building (about 500 feet). Remodel curbs around planting areas to include rainwater capture and storm drains (bioswales).			Medium Priority
26	Add bench seating on downside of planting areas and new landscape (about 150 feet).			Low Priority

Itom	Walling Improvement Initiatives	Short-Term	n Mid-Term	Long-Term
ltem	Walking Improvement Initiatives	(1-3 years)	(4-6 years)	(7-10 years)
19	Relocate vehicle gate at Ross/Asbury to Asbury Street, and vehicle gate at Ross/Ireland to Ireland Street, to control access between 7:00 a.m. and 6:00 p.m. Permit access to TAMU service vehicles and buses at all times. One-way (eastbound) traffic for buses between Houston and Ireland.	Low Priority		
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26	Add bench seating on downside of planting areas and new landscape (about 150 feet).			Low Priority

Itam	Diking Improvement Initiatives	Short-Term	Mid-Term	Long-Term
Item	Biking Improvement Initiatives	(1-3 years)	(4-6 years)	(7-10 years)
42	Build protected two-way bike path along the north side of Enterprise Avenue (1,500 feet) to continue the bike route along the White Creek path and create a complete route from Research Park to MSC.		Medium Priority	
	White Creek Community Center Connection			
43	Build a ped and bike path through Lot 122b (400 feet) to connect the White Creek Community Center with The Leach Teaching Gardens and the College of Agriculture and Life Sciences; provide direct access to WCCC from the path.	Medium Priority		
44	Build two-way bike path on west side of Penberthy Boulevard from John Kimbrough Boulevard to George Bush Drive (about 2,700 feet long).		Medium Priority	
	John Kimbrough Boulevard			
45	Build a two-way bike path on the south side of Kimbrough Boulevard to connect Pickard Pass, the Fan Field and Research Park. About 5,000 feet long.		Medium Priority	
46	Connect the Kimbrough Boulevard bike path with the two-way path on Enterprise Avenue at Enterprise Avenue & Research Park Parkway to complete a bike loop through West Campus (2,900 feet).			Medium Priority
	Olsen Boulevard			
47	Build two-way bike path on west side of Olsen Boulevard from Raymond Stotzer Parkway to John Kimbrough Boulevard (about 1,000 feet on each side of quad). Mark slow route through the West Campus quad (about 500 feet).		Medium Priority	
48	Continue Olsen Boulevard two-way bike path south of Kimbrough Boulevard to George Bush Drive. About 2,400 feet.		Medium Priority	

Itour		Short-Term	Mid-Term	Long-Term
ltem	Biking Improvement Initiatives	(1-3 years)	(4-6 years)	(7-10 years)
	Agronomy Road			
49	Build two-way bike path on west side of Agronomy Road from F and B Road to Raymond Stotzer Parkway, to continue Olsen Boulevard bike route and connection to West Campus. About 4,000 feet including crossing of Raymond Stotzer.			Medium Priority
	Pickard Pass			
50	Address blind corner of path going to Recreation Center with channelization of walking and pedestrian paths. Install planters (3-4), plastic bollards (15-20), and painted markings to reinforce separation of modes and safety at blind corner.	Low Priority		
51	Mark the bike path on pavement at the end of Pickard Pass where it meets the Kyle Field plaza, to provide guidance to cyclists and pedestrians and continuity of bike route to connect with bike lanes on Gene Stallings and Joe Routt Boulevards (about 300 feet).	Low Priority		
	Gene Stallings & Joe Routt Boulevard			
52	Relocate southbound bike lane on Gene Stallings Boulevard to east side of street, forming a 2-way bike path. This reduces conflicts with the garage entry and at the intersections with Joe Routt and Lamar. About 600 feet.	Medium Priority		
53	Add bike roundabout at intersection to distribute bike traffic. This will be a painted circle to allow buses and loading vehicles to go through, as well as the Corps march on gamedays. Relocate gate for bus and service vehicle access on Joe Routt to nearside of intersection, to reduce conflicts with bicycle traffic.	Low Priority		
	Gene Stallings Boulevard & Lamar Street			
54	Convert painted medians to landscaped areas, to channelize traffic, reduce speed and increase safety (about 150 feet of medians on Gene Stallings). Add safety islands on Lamar (about 150 feet) to protect bike and ped crossings. This also reinforces bus priority on Lamar.	Low Priority		

Item	Biking Improvement Initiatives	Short-Term (1-3 years)	Mid-Term (4-6 years)	Long-Term (7-10 years)
55	Raise crosswalk (about 2,000 sq. ft. of new pavement) between MSC and ILCB and eliminate right turns from Lamar to Gene Stallings (at least for non-game days).	Low Priority		
56	Continue two-way bike path across intersection to connect with two-way bike path on Lamar Street, along the Simpson Drill Field (about 60-80 feet).	Medium Priority		
	Lamar/Lubbock & Bizzell Street Intersection			
57	Build "Dutch style" intersection at Bizzell and Lubbock to sort out traffic conflicts between vehicles on Bizzell, TAMU buses turning on Lubbock and bicycle traffic on Lamar and Bizzell.		Medium Priority	

Vehicle Traffic Management

ltem	Vehicle Traffic Management Strategies	Short-Term (1-3 years)	Mid-Term (4-6 years)	Long-Term (7-10 years)
	Olsen Boulevard & Kimbrough Boulevard Intersection			
58	Close intersection to through traffic by installing a diagonal traffic diverter that forces vehicles to turn. Provide an opening or gate for TAMU buses traffic.	Low Priority		
	New Stallings Garage exit to Wellborn Road			
59	Open a new exit to the Stallings Garage on the service road between the garage and the Innovative Learning Classroom Building (ILCB) to provide a direct connection with Wellborn Road and diver traffic from Gene Stallings Boulevard and the intersection with Joe Routt Boulevard. Add an exit only gate.		Low Priority	

Item	Vehicle Traffic Management Strategies	Short-Term		Long-Term
		(1-3 years)	(4-6 years)	(7-10 years)
	Lot 47/51 entry and exit changes			
60	Relocate entry to Lot 47 from Polo Road away from pedestrian crossing to Polo Recreation Center. Close northside exit from Lot 47 to Polo Road. Close northside driveway connecting Lots 47 and 51. Redirect vehicles exiting Lot 47 to southside exit on Bizzell, and to northeast exit on Lot 51.	Low Priority		
61	Eliminate left turn lane to Lot 47 from Polo Road and build a pedestrian safety island to protect crossings. Raise crosswalk (about 400 sq. ft.) and provide a direct route to ADA parking on Lot 51.	Low Priority		
62	Redesign southern entrance to Lots 47/51 so that drivers can turn right or left onto Bizzell when exiting. Open gap on Bizzell Street median to allow entry and exit of vehicles to/from Lots 47 and 51.		Low Priority	

Carpooling & Vanpooling

ltem	Carpooling & Vanpooling Strategies	Short-Term (1-3 years)	Mid-Term (4-6 years)	Long-Term (7-10 years)
	Carpooling Recommendations			
63	Test a third-party application and software platform such as Waze Carpool, Scoop, Ride Shark, or Ride Amigos.	Medium Priority	Medium Priority	Medium Priority
64	Add gamification to the carpooling program through incentives and rewards. For instance, incentives to form a carpool and rewards for using and maintaining a carpool arrangement.	Medium Priority	Medium Priority	Medium Priority
65	Implement/expand a Guaranteed Ride Home program to support ridesharing (carpooling and vanpooling).	Medium Priority	Medium Priority	Medium Priority

ltem	Carpooling & Vanpooling Strategies	Short-Term (1-3 years)	Mid-Term (4-6 years)	Long-Term (7-10 years)
	Vanpooling Recommendations			
66	Test a third-party application and software such as MagicBus to create, track, and maintain use of vanpools.	Medium Priority	Medium Priority	Medium Priority
67	Add gamification through incentives and rewards.	Medium Priority	Medium Priority	Medium Priority

TDM Support

ltem	TDM Support Strategies	Short-Term	Mid-Term	Long-Term
		(1-3 years)	(4-6 years)	(7-10 years)
	Marketing and Promotion			
68	Conduct transportation fairs on campus twice a year—during fall and spring, to promote TAMU transportation options program. Develop collateral materials and content for Transportation Services' website. Focus on both students and faculty/staff.	Medium Priority	Medium Priority	Medium Priority
69	Promote and participate in behavior change campaigns such as Bike-to-Work Day, Earth Day and others. At least 2 campaigns per year and offer incentives and/or rewards.	Medium Priority	Medium Priority	Medium Priority
70	Create an on-boarding program for new students and employees to educate them about all transportation options, steer them to not bring a car to campus, and help them use options. Include personalized travel plans, commute commitments and motivational interviews.	Medium Priority	Medium Priority	Medium Priority

ltem	n TDM Support Strategies	Short-Term	Mid-Term	Long-Term
		(1-3 years)	(4-6 years)	(7-10 years)
71	Promote TAMU transportation options as a brand and through social media channels, radio ads and television, website and collateral materials. Establish a generous marketing budget of at least \$100,000 to conduct these activities, and a specific marketing plan with participation and reach goals.	High Priority	High Priority	High Priority
72	Use a TDM admin platform to manage the program and track participation, such as Luum, Commutifi, Ride Amigos, or Ride Shark. These platforms allow data inputs from technology and service partners, as well as calendars for users to report commute and engage in gamification.		High Priority	High Priority
73	Publish shuttle services GTFS data for widespread distribution and use by Google Maps and other applications such as the Transit App. This to provide more flexibility to users to consume transportation options information.	Medium Priority	Medium Priority	Medium Priority
74	Publish bikesharing and carsharing information through the bikesharing and micromobility data standards for widespread distribution and use by developers and mobility applications. Also, to provide users with multiple channels and options to consume transportation options information.	Medium Priority	Medium Priority	Medium Priority
	Other Programs			
75	Increase promotion and availability of Guaranteed Ride Home program. Make it extend to carpool, vanpool, and transit users (Aggie Spirit and Brazos Transit District users).	Medium Priority	Medium Priority	Medium Priority
76	Increase promotion of carsharing, adding more cars on campus and in the University Drive commercial area.	Medium Priority	Medium Priority	Medium Priority
	Organizational Capacity			
77	Hire a TDM manager (incl. data analytics skills)	High Priority	High Priority	High Priority



6 Summary





Summary

Align scope with campus initiatives
Engage stakeholders
Gather data

- Observe in the field
- Communicate
- Collaborate

