

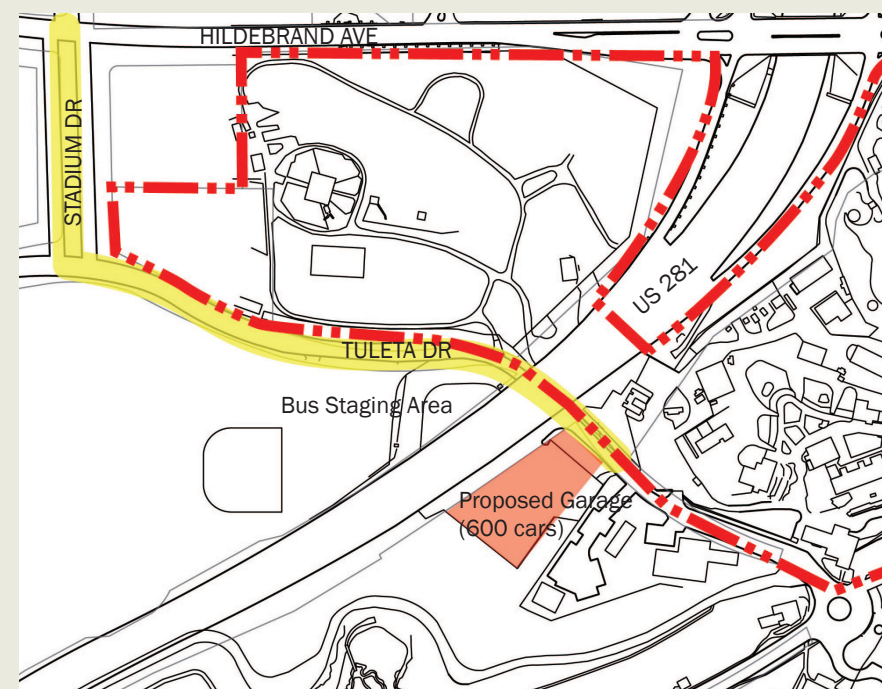
# V TRANSPORTATION & PARKING BRACKENRIDGE PARK

MASTER PLAN

Existing and proposed parking garages



Proposed Zoo parking garage on Tuleta Drive



## PARKING

There are more than 20 parking lots or roadside parking of various capacities scattered around the Brackenridge Park currently. The capacities of these parking locations vary from under 20 to over 500. The Master Plan proposed a more concentrated parking scheme by replacing many parking lots or roadside parking with a few large parking garages. The table on the facing page shows the existing parking lots, the proposed actions, and estimated future capacity.

Under no circumstances should additional surface parking be added to the park. Too much of the park has been consumed already by surface parking, which is entirely antithetical to the purpose and nature of a park, both in perception and in ecological consequences. In fact, impervious cover should be reduced through removal of excess paving and conversion of paved areas to pervious paving through implementation of low impact development practices.

Ongoing stakeholder and park neighbor parking and traffic issues can be mitigated by increasing parking availability. In the northeast section of the park, the existing Avenue B parking garage should be expanded by adding one and one-half levels to maximize that garage's capacity, but not expand its footprint.

West of the zoo and Paul Jolly Center for Pet Adoption, a parking garage should be constructed on SAISD property for joint use by park visitors and Alamo Stadium event attendees. This will require a joint agreement between the city and SAISD to address ownership and funding issues, but as such a garage addresses the needs of SAISD, the city, and various park stakeholders, the effort is worthwhile.

South of the park, the community should support the construction of a parking garage on DoSeum and city right-of-way. This plan would include the closure of Margaret



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Street and reclamation of that right-of-way for a parking structure which would take in existing parking lots at the DoSeum. As at the Witte Museum and the San Antonio Zoo, the DoSeum has insufficient land for surface parking to be a viable proposition. Structured parking at the museum itself will preserve open space for more appropriate uses.

Together with the University of the Incarnate Word (UIW) and other stakeholders, a new joint-use parking garage should be considered east of Miraflores on AT&T property. Currently, significant numbers of UIW students park within park boundaries and walk to campus. This is far from an ideal situation for a number of reasons, and any parking needs not supplied within the UIW campus for its students should be addressed by parking on private land. The AT&T property offers good access to UIW and, if public access is allowed when full capacity is not needed by UIW, could potentially be used by park visitors.

## TRAFFIC ISSUES

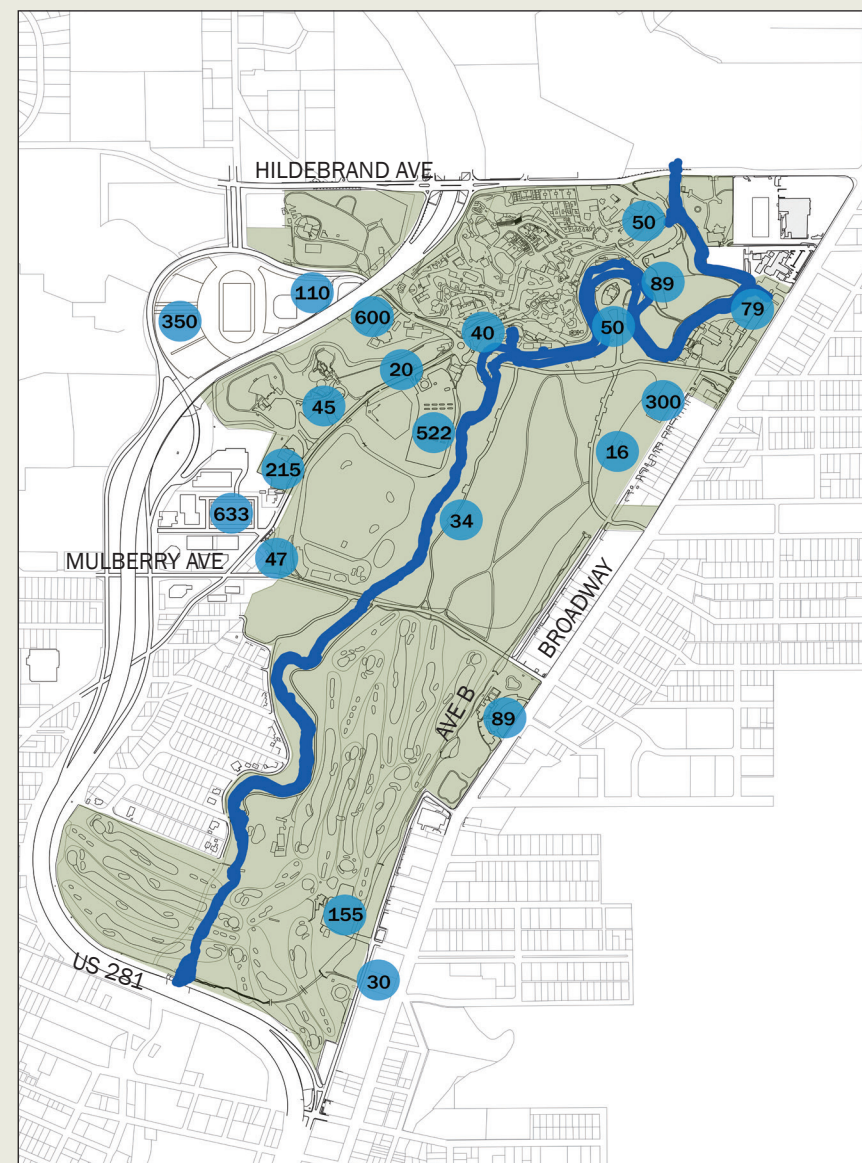
In its early days, Brackenridge Park was frequently enjoyed from the seats of that new invention, the automobile. Roads were built specifically to allow people to drive through the park to view the scenery and features. Alpine Drive, roads in the Wilderness Area, and the low-water crossings are all relics of that time.

As visitation to the park has grown, traffic has increased significantly. Much of the traffic is a consequence of the zoo's entrance deep within the park – on days of high zoo visitation, the carrying capacity of St. Mary's is overwhelmed. Elsewhere in the park, roadways fill with traffic as visitors unsuccessfully search for parking spaces.

While modern trends for parks point decidedly towards maximizing vegetated open space and emphasizing walking and non-vehicular modes of transportation within park

Public input in 2016 was generally in opposition to relocating parking, implementing alternate methods of transportation, or closing roadways within the park.

Existing Parking



Existing and Proposed (\*) Parking Facilities

Parking Lot	Approximate Capacity
Upper Labor	15
Donkey Barn	35
Lambert Field	27
Lambert Beach Softball Field	61
Lambert Beach/Joske Pavilion	52
Witte North Lot	39
Witte Museum	40
Brackenridge Drive Picnic Tables	16
Zoo Administrative Lot	40
SAISD	110
Japanese Tea Garden Upper Lot	37
Japanese Tea Garden Lower Lot	10
North St. Mary's Street	20
Zoo Lot	522
Brackenridge Drive	50
Red Oak Drive	34
Brackenridge Park/Witte Garage	300
Tuesday Musical Club	215
First Tee/Polo Field	47
Lions Field	89
Brackenridge Park Golf Course	155
Bakery Building	30
River Connection	23
*Proposed Zoo Garage	*600
	-
<b>Total Capacity</b>	<b>2567</b>



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MASTER PLAN

borders, public input was generally in opposition to relocating parking, implementing alternate methods of transportation, or closing roadways within the park. This leaves the current traffic issues unresolvable. It is likely that traffic and parking issues will only increase as areas around the park are redeveloped, adding residential density.

There are some traffic interventions that should be undertaken to ease traffic issues around the park that would also benefit other institutions and people who live and travel near the park. The first of those interventions would be improvements to the Hildebrand Avenue/Devine Road intersection.

Hildebrand Avenue/Devine Road: Peak Hour Traffic Projection

Travel Directions	2014	2017	2022
Northbound Left	31	34	39
Northbound Through	26	28	33
Northbound Right	47	51	60
Southbound Left	230	251	291
Southbound Through	178	195	225
Southbound Right	12	13	15
Eastbound Left	4	4	5
Eastbound Through	643	703	815
Eastbound Right	80	87	101
Westbound Left	222	243	281
Westbound Through	614	671	778
Westbound Right	85	93	108
Average Delay (Seconds/Vehicle)	33.8	49.6	98.1
Level of Service	C (Acceptable)	D (Congestion)	F (Grid Lock)

Right: Brackenridge Park Garage near Witte Museum

Below: Devine Road and Stadium Drive at Hildebrand Avenue



## Hildebrand Avenue/Devine Road Intersection Upgrade

When the majority of visitor volumes divert to the Tuleta Drive/Zoo parking garage, the traffic volume at the Hildebrand Avenue/Devine Road intersection will increase significantly. Our research shows that even without the redistribution of the Park/Zoo traffic, the Hildebrand Avenue/Devine Road intersection will operate over capacity in a few years. With the traffic volume counts collected in 2014, and an estimated moderate annual growth rate of 3%, engineers simulated the current and future performance of the intersection. The table at left shows that the intersection’s traffic volume will grow out of capacity in the near future.



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Without congestion mitigation improvements, the Hildebrand Avenue/Devine Road intersection will not have sufficient capacity to handle the increasing traffic volume of the Brackenridge Park visitors. We propose the following upgrades for the intersection to increase its capacity:

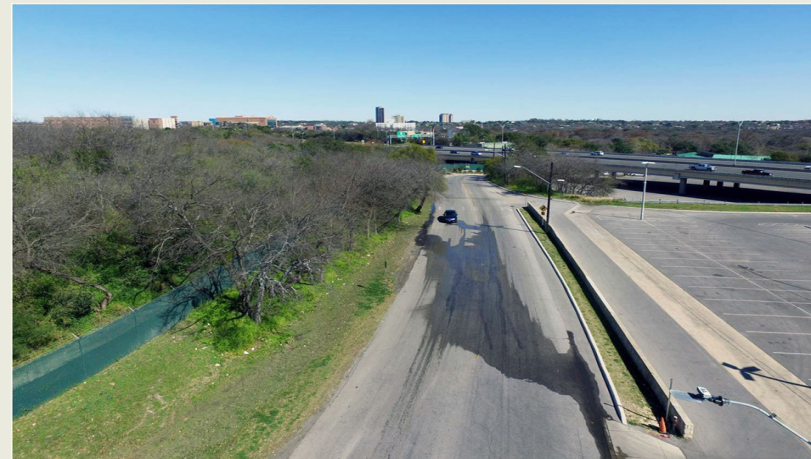
- Widen roadway and install an eastbound dedicated left-turn lane
- Widen roadway and install a westbound dedicated left-turn lane
  - Upgrade the traffic signal systems to provide protected-permissive phasing for the eastbound left-turn and the westbound left-turn
  - Optimize signal-timing plan to suit the volume changes in different time periods of the day.

Traffic simulation shows that the 2022 peak hour traffic level of service will be improved from F to C with the above upgrades implemented, and the average delay will be reduced from 98.1 seconds/vehicle to 26.5 seconds/vehicle. In addition to the Park/Zoo visitors, the Hildebrand Avenue/Devine Road intersection upgrade will also benefit Alamo Stadium, Trinity University, Incarnate Word High School, and University of Incarnate Word. The project could require land acquisition. The detailed traffic signal plan, pavement marking plan, cost estimates, and coordinated funding plan among multiple stakeholders should be prepared after completion of the Master Plan.

## Bus (School and Charter) Considerations

The Zoo, Witte Museum and Botanical Garden generate a large number of school and charter bus trips annually, mostly concentrated during the 9-month school year. The DoSeum, a relatively new entity adjacent to Brackenridge Park, also generates bus traffic, and has not completely geared up its programming that could generate additional bus traffic. Refer to Stakeholder Meeting Notes in the Appendix of this document for discussions about bus counts.

All of these institutions would benefit from there being a common bus holding area away from their facility. The SAISD parking lot on Tuleta adjacent to US 281 has been identified as a potential bus holding area. It is easily accessed from each of the institutions mentioned. A joint use agreement would need to be put in place between the involved parties and SAISD. Minimum facilities (restrooms, shade structure, benches/seating, lighting, etc.) could be provided to accommodate the waiting bus drivers.



Left: Tuleta Drive near US 281

Below: Proposed bus staging area on Tuleta Drive

