

APPLICABLE GOALS, POLICIES, AND ACTIONS OF THE 2035 SACOG		
METROPOLITAN TRANSPORTATION PLAN		
Goals	Policies	Strategy / Actions
	1 SACOG intends to provide	1.1 Develop a form-based code handbook
	information, tools, incentives	designed for local jurisdictions in this region.
	and encouragement to local	1.2 Invest in the Community Design Funding
	governments that have been	Program, an incentive program for local
	chosen to grow consistent	governments that provides transportation
	with Blueprint principles.	funding for smart growth developments that
		promote walking, bicycling and transit use.
		1.3 Pursue regulatory reform at the national,
		state and local levels to encourage Blueprint
		style growth.
		1.4 Support incentive programs that make
		infill development more attractive and
		lucrative.
		1.5 Create and invest in a rural strategy and
		program to improve transportation systems
		that affect the economic viability of rural
		areas located in jurisdictions that implement
		good growth patterns, consistent with the
		Blueprint Principles, the Rural – Urban
		Connections Strategy, or other rural
		initiatives.
	2 SACOG intends to educate	2.1 Provide computer software and technical
	and provide information to	assistance to local governments.
	policymakers and the public	2.2 Monitor and report on the transportation
	about the mutually	and air quality impacts of development
	supportive relationship	patterns and their relationships to Blueprint
	between smart-growth	growth principles.
	development and	2.3 Monitor and report commute patterns,
	transportation.	traffic levels and transit use compared with
		projections in this MTP.
		2.4 Develop educational materials to inform
		local discussions, particularly in infill areas,
		about neighborhood traffic behavior and the
		effects of higher density on traffic, transit,
		walking and bicycling.
		2.5 During the design phase, review
		transportation projects to asses whether they
		foster transportation choices, improve local
		community circulation, or divide
		communities, and either avoid or mitigate
		negative impacts (including those to public
		health, safety, air quality and the
		environment).
	3 SACOG will encourage	3.1 Encourage development proposals that
	local jurisdictions in	are well-suited and located to support high
	developing community	capacity transit use.
	activity centers well-suited	3.2 Identify appropriate "best practices" for
	for high-capacity transit	complete streets, and initiate a technical
	service.	assistance program to help local agencies
	SCI VICE.	
		develop street designs that are sensitive to
		their surroundings and context.
		3.3 Establish regional guidance for high-
		capacity transit station area planning.
		3.4 Support efforts by transit agencies and

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		local governments to site and design transit
		centers and stations close to economic
		centers and neighborhoods and to expand
		park-and-ride facilities at a few key stations.
		3.5 Encourage local agencies to develop an
		interconnected system of streets, bikeways,
		and walkways that supports a more compact
		development form; avoid building new
		circulation barriers; accommodate safe travel
		for all users; and provide connections
		through existing gated communities, walls
		and cul-de-sacs to access schools, activity
		centers and transit stops.
		3.6 Encourage development patterns that
		provide safe and efficient pedestrian and
		bicycle access to trunk commuter transit
		lines.
	4 SACOG encourages every	4.1 Develop the required Regional Housing
	local jurisdiction to pursue	Needs Plan to guide local agencies
	housing in all price ranges,	assessments of housing supply and price
	to meet the housing needs of	ranges.
	the local workforce and	4.2Encourage adequate supply of housing at
	population, and forestall	a variety of price ranges in the region, to
	pressure for long, external	prevent the export of housing to adjacent
	commuting.	regions.
	5 SACOG should seek to	
		5.1 Work to identify and preserve land uses
	develop and inform local	to meet goods movement needs of local
	governments and businesses	customers.
	about regional strategy for	5.2 Study and consider the need for land for
	siting industry and	suppliers, distributers, and other businesses
	warehousing that need good	with regional clientele that may prefer to be
	freight access.	near the center of the region with good
		freeway access, but do not need high-cost
		center-city sites.
		5.3 Study and consider the needs of the
		agricultural industry for refrigeration and
		consolidation units, warehousing, processing
		plants and other facilities near transportation
		access.
	6 SACOG encourages local	6.1 Minimize the urban growth footprint of
	governments to direct	the region by improving interior circulation
	Greenfield developments to	and access instead of access to and beyond
	areas immediately adjacent	the urban edge.
	to the existing urban edge	6.2Provide incentives and invest in
	through the provision of	alternative modes to serve infill and more
	information, incentives and	compact development.
	pursuit of regulatory reform	6.3 Consider funding to acquire conservation
	for cities and counties.	easements accompanying specific regional
		connector road projects, to protect land from
		development in areas that are not intended or
		zoned for development.
		6.4 Continue to pursue regulatory reform at
		the state and national levels to remove
		barriers to environmentally sensitive
		developments, when appropriate, at the edges
		of existing urbanization.
	7 SACOG intends to develop	of existing urbanization.  7.1 Use research, data and modeling to

inform a public participation process to a Rural-Urban Connection Strategy (RUCS) for conceptualize approaches to sustainable rural land use policies encompassing at a ensuring good urban-rural connections and promoting minimum, issues such as agricultural the economic viability of practices (including energy production), rural lands while also natural resource protection, rural development practices (including methods to protecting open space encourage job-housing balances) and resources to expand and support the implementation infrastructure needs. of the Blueprint growth 7.2 Ensure consistency between the RUCS strategy and the MTP. and local Habitat Conservation Plans and Natural Communities Conservation Plans. 7.3 Ensure that the RUCS is coordinated with Blueprint and MTP to support each of these planning efforts individually, as well as collectively. 7.4 Conduct analysis on how various rural land use strategies effect vehicle miles of travel and air emissions, as well as rural economic viability and environmental sustainability. 7.5 Develop sustainable rural land use policies through a public process that encompasses, at a minimum, issues such as agricultural economic development (including energy production), natural resource protection and agricultural land conservation, rural development (including job-housing balances), and infrastructure 7.6 Invest in transportation projects that help implement the RUCS recommendations. Investment recommendations mat include agritourism, goods movement and funding rural road improvements between cities when the county implements growth patters consistent with Blueprint. 8 SACOG intends to support 8.1 Continue and increase the region's previous commitment to TDM programs as and invest in strategies to reduce vehicle emissions that strategy for education and promotion of can be shown as cost alternative travel modes for all types of trips effective to help attain and toward reducing vehicle miles traveled. maintain clean air and (VMT) by 10 percent. better public health. 8.2 Continue and increase the region's previous commitment to funding the Sacramento Emergency Clean Air and Transportation program. 8.3 Set aside funding for the annual Spare the Air campaign, a summer program operated by the Sacramento Metropolitan Air Quality Management District that informs the public

> about days when the ozone danger is high and encourages the public to use nonpolluting alternatives to driving.

8.4 Help air districts and local agencies study localized air pollution impacts on health and the environment, including air toxins,

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		providing analysis and information from
		SACOG's planning work. Support public
		information efforts to raise awareness on
	) at acat : -	these connections.
l l	9 SACOG intends to use the	9.1 Adopt a transportation pricing policy,
	best information available to	adopt a Safe Routes to School policy and
	implement strategies and	implement a pilot program, expand public
_	projects that lead to reduced	access to travel information through the 511
	greenhouse gas (GHG) emissions.	program, and adopt a "Complete Streets"
•		policy.  9.2 Comply with the Federal Clean Air Act
		by recommending selected MTP2035
		projects as draft transportation control
		measures to help reduce GHG emissions and
		identify transportation emission control
		measures.
		9.3 Create an alternative fuel vehicle and
		infrastructure toolkit for local governments,
		create a public education program on
		individual transportation behavior and
1		climate change, and create a regional open
		space strategy.
1		9.4 Develop a regional climate change action
		plan, and develop and implement a
		construction energy conservation plan.
		9.5 Enhance I-PLACE'S model to asses
		greenhouse gas impacts.
	10 SACOG should consider	10.1 Examine public policy seeking to reduce
	strategies to green the	the cost of or influence the trade-offs
	system, such as quieter	between operating efficiency and
	pavements, cleaner vehicles,	environmental impact.
	and lower energy	10.2 Encourage and make available a choice
	equipment, where cost effective, and consider	of efficient modes to move freight.  10.3 Promote early investment in 2007-
	regional funding	complaint diesel engines.
	contributions to help cover	10.4 Support equipment retrofits under the
	the incremental cost.	Carl Moyer program.
	Various voice	10.5 Expand use of natural gas or hybrid
		delivery vehicles and handling equipment.
		10.6 Increase recycling of materials, such as
		tires and lubricants, and improve handling of
		wastewater and chemical residues.
		10.7 Explore and publicize energy
		conservation at freight terminals.
		10.8 Encourage goods movement driver
		training programs that encourage fuel
		conservation, trip reductions and safety.
	11 SACOG intends to	11.1 Continue to pursue new and reformed
_	pursue and support	transportation funding methods and sources
	enactment of sustainable	to implement MTP2035 that are stable,
	funding sources adequate for	predictable, flexible, adjustable and adequate
	maintenance and	in the whole to operate and expand the
	rehabilitation of highways,	system.
	streets and roads, and	11.2 Strive to simplify and add flexibility to
	operations and maintenance	the overall funding structure when putting
	of transit services.	new financing tools or changes to the
		financing structure in place.

	11.3 Promote competition in the delivery of
	services, to foster greater efficiency,
	innovation and diversity of options, including
	consideration of revised public agency
	arrangements, public-private partnerships or
	contracting out.
12 SACOG should suppo	
authority for local option	
funding sources to allow	
local areas to customize	local level, so that local agencies can
transportation funding a	
investment for maintena	<u> </u>
and operation of the exis	
system and expansion to meet future needs.	
meet tuture needs.	12.2 Seek funding sources that are indexed to growth and inflation to pay for basic
	maintenance and operations.  12.3 Support the Sacramento Transportation
	Authority's intent to pursue a supplemental
	transportation funding program equivalent in
	revenue to one-half percent countywide sales
	tax. This revenue would be expended
	approximately equally for enhanced public
	transit and local street and road maintenance
	in Sacramento County and take effect no later
	than 2012.
13 SACOG invests feder	al 13.1 Seek adequate funding so local agencies
and state funds that com	e to can maintain and rehabilitate streets and
SACOG to achieve regio	
policies and priorities, as	
described in more detail	
the sections that follow.	regional funding for improvement and
	expansion of the trunk highway and road
	system.
	13.2 Support new or increased funding
	resources for local agencies to enable
	operation of existing and expanded transit services, including and replacement of
	equipment and facilities including local-
	option funding sources adequate to preserve
	regional funding for service expansion.
	13.3 Encourage cities and counties to collect
	development-based fees or funding sufficient
	for both local road improvements and
	regional-scale road and transit improvements,
	since SACOG's regional funding can meet
	only 25-30 percent of regional project costs
	in this MTP, so that regional-scale
	improvements can be built in a timely way;
	offer technical or coordination assistance
	from SACOG as needed.
	13.4 Encourage local agencies to fund local
	arterial access and traffic capacity projects
	with local development-based fees
	supplemented with other local funds as
	appropriate.
	13.5 Study, coordinate discussions, and

	explore options for establishing a region-
	wide program dedicated to funding the
	growing need for roadway improvements and
	reconstruction and mitigation of community
	impacts on designated arterial truck routes
	and arterial roads that large trucks commonly
	use.
14 SACOG should look for	14.1 Keep apprised of federal and state
specialized funding	program funding cycles and specific funding
programs at the state or	opportunities, advise local agencies about
federal level, and work with	them in a timely way, and help to zero in on
local agencies to bring in	projects that fit program requirements
such funds to start	particularly well and are far enough along in
innovative projects or	the delivery to maximize chances for success
advance specific projects	at bringing federal or state discretionary
that are well-matched to	funds into the region.
program goals.	14.2 Help coordinate multi-agency packages
	of projects for federal and state discretionary
	programs and grants, where a regional
	strategy seems likely to improve the chances
	of success.
	14.3 Fund some project development
	specifically to create a list of key hard-to-
	implement projects ready for ad hoc funding
	opportunities.
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	14.4 Help local agencies get funding from
	specific safety programs for safety and
15 31 30 3	security improvements.
15 SACOG should seek to	15.1 Seek to pool funds and programs
manage state and federal	wherever reasonable and feasible, to increase
funding that comes into the	flexibility in the use of funds and delivery
region so as to simplify and	projects.
expedite project delivery,	15.2 Use available funding to ensure timely
including working out ways	construction of currently delivered projects,
to exchange various types of	to the greatest reasonable extent, and
funds among local agencies	substitute future funding commitments onto
and projects.	projects that will be delivered in the future.
	15.3 Seek to concentrate federal funds on a
	limited number of projects that must be
	federalized, so that many other projects can
	avoid federal requirements and processes.
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16 SACOG should study	avoid federal requirements and processes.  15.4 Support judicious use of bonding and other financial tools to enable earlier construction of projects, and consider use of
16 SACOG should study ways to use pricing more	avoid federal requirements and processes.  15.4 Support judicious use of bonding and other financial tools to enable earlier construction of projects, and consider use of regional funds to supplement or enhance revenue bonding tools when appropriate.  16.1 Study ways that parking pricing can
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ways to use pricing more effectively in funding of	avoid federal requirements and processes.  15.4 Support judicious use of bonding and other financial tools to enable earlier construction of projects, and consider use of regional funds to supplement or enhance revenue bonding tools when appropriate.  16.1 Study ways that parking pricing can help achieve objectives of this MTP, including garages to support more intense
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ways to use pricing more effectively in funding of	avoid federal requirements and processes.  15.4 Support judicious use of bonding and other financial tools to enable earlier construction of projects, and consider use of regional funds to supplement or enhance revenue bonding tools when appropriate.  16.1 Study ways that parking pricing can help achieve objectives of this MTP, including garages to support more intense land uses; revenue for alternative modes and surcharges for policy purposes; and encouragement of walking, bicycling, transit use and carpooling.  16.2 Consider seeking a federal Value

	accuments tell longs on bridges may at the
	occupancy toll lanes or bridges, pay-at-the-
	pump auto insurance, or auto loans, at an
	appropriate opportunity.
17 SACOG acknowledges	17.1 Encourage and support Caltrans in
and supports preservation of	seeking traffic management and safety
the existing road and	improvements along with highway
highway systems as the top	rehabilitation projects from the State
priority for local public	Highway Operations and Protection Program.
works agencies and	Ensure that both urban and rural needs are
Caltrans, and expects to help	targeted.
them secure adequate	17.2 Consider public-private partnerships and
funding sources for the	
_	competitive service contracts for
necessary work.	maintenance and operations, for a more
	efficient system.
	17.3 Expect local agencies to examine and
	consider traffic operational strategies and
	investments as temporary improvements to
	buy time or develop lower cost ultimate
	alternatives for capital projects for road
	expansion with SACOG to consider such
	projects as high priorities for regional
	funding.
18 SACOC supports the	18.1 Participate in the development and
18 SACOG supports the	
development and	implementation of corridor system
implementation of corridor	management plans for the following
system management plans	corridors:
(CSMP) as a method of	I-80: State Route 113 to Sierra
integrating transportation	College Boulevard
system operational	<ul> <li>U.S. 50: I-80 to Camino</li> </ul>
management and regional	State Route 99: San Joaquin County
planning so as to maximize	line to U.S. 50, I-5 to State Route 20
system efficiency and	I-5: Hood-Franklin Road to Metro
effectiveness.	Airport
	• State Route 65: I-80 to State Route
	70
	18.2 Encourage all stake-holders to actively
	participate in the development and
	implementation of each CSMP.
	18.3 Coordinate SACOG transportation
	modeling and data collection activities with
	the travel forecasting and analysis activities
	associated with each CSMP.
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19 SACOG intends to ensure	19.1 Use timely updates of short-range
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coordination among all	transit plans, the regional human services
coordination among all forms of existing and	transit plans, the regional human services transportation coordination plan, and periodic
coordination among all forms of existing and expanded transit services,	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on
coordination among all forms of existing and expanded transit services, including those provided by	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and
coordination among all forms of existing and expanded transit services, including those provided by social services agencies, for a	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and shortfalls.
coordination among all forms of existing and expanded transit services, including those provided by	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and shortfalls.  19.2 Seek a more seamless trip through better
coordination among all forms of existing and expanded transit services, including those provided by social services agencies, for a	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and shortfalls.  19.2 Seek a more seamless trip through better travel information for trip planning, reliable
coordination among all forms of existing and expanded transit services, including those provided by social services agencies, for a	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and shortfalls.  19.2 Seek a more seamless trip through better travel information for trip planning, reliable schedules, coordination between operators
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coordination among all forms of existing and expanded transit services, including those provided by social services agencies, for a more effective system.	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and shortfalls.  19.2 Seek a more seamless trip through better travel information for trip planning, reliable schedules, coordination between operators for transfers, service changes, complementary services, a universal fare card and information available at transit stops.  20.1 Increase public perception of the value,
coordination among all forms of existing and expanded transit services, including those provided by social services agencies, for a more effective system.	transit plans, the regional human services transportation coordination plan, and periodic performance audits to provide guidance on priorities and estimates of funding needs and shortfalls.  19.2 Seek a more seamless trip through better travel information for trip planning, reliable schedules, coordination between operators for transfers, service changes, complementary services, a universal fare card and information available at transit stops.

 transit access, security,	product specific advertising, promotion of
comfort, schedules and	new and restructured services the regional
information whenever	emergency ride home program, outreach for
opportunities arise.	special events, and education for those
	unfamiliar with how to use transit effectively.
	20.2 Seek to improve transit access via safe
	and pleasant sidewalks and walkways around
	transit stops, accessibility for the disabled,
	on-board bike racks, better signs for transit
	access, shelters, improved transfer points and
	secure park-and-ride locations.
	20.3 Improve transit and supplemental
	transportation services for medical
	appointments, including escort services at
	medical offices for patients needing extra
	assistance, priority parking for dial-a-ride and
	social service transit vehicles.
	20.4 Take steps to improve safety and security at crosswalks, transit stops, and
	along main access route to transit, with
	higher priority for low-income, minority, and
	high crime areas.
	20.5 Improve connections among all forms of
	transit service by seeking better coordinated
	schedules among operators, more convenient
	and comfortable transfer locations, notice and
	coordination of schedule changes, next-bus
	signs at high use stops, and better trip
	planning tools and public communications.
21 SACOG should develop	21.1 Preserve existing rural transit and para-
guidelines for rural transit	transit service levels, but examine them
services, as a lifeline for non-	periodically to ensure effectiveness for
drivers and park and ride	transit-dependant residents.
services for commuters.	21.2 Consider specialty transit services for
	agricultural areas seasonally, and for tourist
<b>22</b> G1 G0 G1	attraction and events.
22 SACOG in partnership	22.1 Expand transportation management
with community and	organizations and outreach partners to
employer organizations,	provide education and advocacy programs
intends to support proactive and innovative	across the regions six-county area, with broader focus on alternative travel choices
transportation demand	for all trip types.
management programs	22.2 Assist transportation management
covering all parts of the	organizations to broaden and update
urbanized area, to offer a	rideshare databases offer incentives for
variety of choices to driving	taking alternative modes or telecommuting,
alone.	offer specialty services such as vanpooling,
	carsharing, or subscription bus here feasible,
	expand promotional campaigns, and reach
	out to the public with personalized alternative
	trip planning and instant ride matching.
23 SACOG expects	23.1Improve transit services and options for
operators to plan for service	people with physical, cognitive and mental
to transit-dependent	health disabilities, by ensuring all vehicles
populations – disabled, low-	and facilities are safe and accessible, access
income, seniors, youth –	routes to transit stops are safe and accessible
within a context of service to	where feasible, drivers are trained about

attract riders who now	regulations and good practices, and transfers
drive.	are convenient and usable.
	23.2 Prepare for a large increase in senior
	population by using universal design
	features, such as low-floor vehicles,
	automatic doorways, flatter walkways and
	curb ramps, and handrails, to enable seniors
	to safely use regular transit services and
	preserve limited paratransit resources for
	those who cannot travel without direct assistance.
24 SACOG intends to strive	24.1 Ensure transportation system
to ensure community	improvements provide equitable and
outreach to low-income and	adequate access by road and transit to low-
minority communities whose	income and minority communities.
needs and concerns	24.2 Ensure that projects to serve those
otherwise might be	communities with greater transit needs gets
overlooked.	explicitly considered in the MTP and when
	programming funds, pursue specific federal
	or state funding grants available for this
	purpose, and seek better coordination of all
	types of transit services and connections for
	these communities.
	24.3 Examine commute pattern travel needs
	of those in job placement programs, such as
	CalWORKs, and reverse commute flows as a
	guide to transit and supplemental travel
	service improvements.  24.4 Seek to deploy supplemental
	transportation options, including shared-ride
	arrangements, volunteer drivers, taxi
	vouchers, community travel companions,
	cost-and fare-sharing, and mobility training
	on transit, bicycle and pedestrian options, to
	complement regular and social service transit
	service.
	24.5 Ensure through examination, context-
	sensitive design, and mitigation of
	transportation systems impacts wherever
	feasible, particularly localized air quality and
	noise impacts, when building improvements
	through or near low income and minority
	communities which are often found adjacent
25 SACOC should study	to freeway and railroad corridors.  25.1 Improve SACOG's regional freight
25 SACOG should study, consult with, and help	forecasting tools, including a periodically
consult with, and help coordinate local agency	updated commodity flow survey that includes
activities to provide for a	both consumer goods and agricultural
smoother movement of	products, an upgraded economic model,
trucks through and	shipping and trucking industry contacts to
throughout the region.	spot and verify trends, ability to estimate up
	or down from limited data points, and annual
	truck counts at key locations.
	25.2 Maintain a goods movement advisory
	group to share information about evolving
	freight patterns, technologies and shipping
	needs, and identify, examine and coordinate

government policies activities and improvement projects that can make goods movement more efficient and reduce impacts in both urban and rural areas.

25.3 Collect sound information about urban and rural impacts of the logistics industry and the customers it serves, pertaining to infrastructure demands and safety, emissions, noise and traffic impacts from trucks, and review the implications for nearby and downstream communities when local agencies consider permits for commercial and industrial businesses that involve significant amounts of truck traffic.

25.4 Identify and reconsider regulatory and institutional barriers that hamper efficient travel patterns for trucks, identify an adequate number of preferred truck routes for efficient truck access into and across jurisdictions within the region, actively seek solutions to accommodate truck access and traffic with community concerns on all main arterial routs.

25.5 Consider adding or changing features of projects to facilitate truck travel.

25.6 Identify and consider projects that could expand the market for shipping freight by rail or merchant ship, to offer and alternative for trucking for more kinds of freight shipments, such as deeper port channel rail intermodal transfer points, and better truck intermodal connections for "last mile" delivery.

26 SACOG intends to preserve some capacity on major freeways within the region for freight within the region for freight and other interregional traffic by providing additional capacity for local and regional traffic on major arterials running parallel to the major freeways. The complementary arterial and freeway expansions are intended to better separate local and interregional traffic, but no lane restrictions (e.g., truck-only lanes) to the freeways are proposed. Under current state program structure, SACOG expects to carry the main responsibility, shared

with Caltrans, to fund interregional projects at the edge of the region when 26.1 Seek to coordinate regional truck routes for large trucks, and expect local agencies to include truck access policy and strategies in mixed use and large commercial or industrial developments.

26.2 Support rail and highway investments that route freight around, not through a region.

26.3 Open up interregional highway capacity only when goods movement and non-commute traffic warrants it. Evidence of this need can also occur when local roadways bear the burden of goods movement diverted from congested highways.

growing der	nand for traffic
to, from, an	d through the
region warr	ants expansion
of interregion	onal routes.
27 Support	road and transit 27.1 Focus on ensuring the arterial system
expansion in	vestments that performs well for the increased number of
	ve of 2035 MTP local trips, to support infill and compact
land-use par	
	pushing it outward because of overly
	congested conditions, providing a strong grid
	network (which offers alternative routes)
	wherever land use and other barriers allow.
	27.2 Support corridor mobility investments
	along major arterials that serve multiple
	modes of travel through combining road
	capacity improvements to support smart
	growth. Supportive investments include
	enhancements for high capacity transit,
	technology development and safer
	intersections.
28 Prioritize	
	that result in an land use patterns that will generate transit
	nsit system that ridership and improve the cost recovery rates
serves both	
dependant a	nd choice riders. 28.2 Pursue transit expansion using a wide
	spectrum of services; each best suited to
	particular travel markets, considering but not
	limited to light rail, streetcar, express bus,
	bus rapid transit, local service bus,
	neighborhood shuttle bus, dial-a-ride,
	assisted paratransit for the disabled,
	subscription bus and jitney.
	28.3 Consider the full life-cycle cost of
	transit options covering both equipment and
	operations, the relative value of broader area
	coverage versus high capacity for a limited
	corridor, and more routes versus higher frequency, for each situation.
	28.4 Develop truck transit corridors between
	communities, and local transit circulation
	within communities, to attract riders both for
	commuting and local activities.
	28.5 Develop local transit services that serve
	local travel patterns and connect with high
	capacity trunk transit lines with timed
	transfers.
	28.6 Design commute transit as a door-to-
	door system, with full or limited express
	routes, short waits at transfers, and walk
	access or good distribution at each end.
	28.7 Develop a bus and carpool lane system
	for key commuter corridors and expand
	transit service to use it.
	28.8 Address commute congestion with
	transit first/carpool second strategies for
	downtown Sacramento, and carpool first/
	transit second strategies for suburban job

	centers until employment density indicates a
	shift, to switch drivers into empty seats in
	both transit and autos.
	28.9 Seek to build good bus transit service
	with heavy, established ridership as a
	precursor to investment in rail transit, to
	ensure return on the high capital investment
	for rail.
	28.10 Factor in the benefit of rail transit as a
	permanent investment, with stronger ability
	to attract transit oriented development plans
	around it, where local smart growth planning
	and the real estate market already promise
	development dense enough to support rail
	investment.
	28.11 When a transit route or service fills to
	capacity, examine complementary service of
	another type as an alternate simply to adding
	capacity to the route that is full.
	28.12 When planning high-capacity transit
	corridors, consider expanding support
	facilities, such as access sidewalks and
	walkways, passenger shelters, transfer stations, next-bus notifications signs, signal
	preemption and route park-and-ride lots, as
	part of development along the route.
29 SACOG encourages	29.1 Implement the Regional Bicycle,
locally determined	Pedestrian and Trails Master Plan, going after
developments consistent	126 high priority improvements first.
with Blueprint principles	29.2 Invest in safe bicycle and pedestrian
and local circulation plans to	routes that improve connectivity and access
be designed with pedestrian,	to common destinations, such as connections
bicycle and transit as	between residential areas and schools, work
primary transportation	sites, neighborhood shopping, and transit
considerations.	stops and stations. Also invest in routes to
	and around schools so trips can be made by
	bicycling and walking.
	29.3Invest towards the eventual creation of a
	regional bicycle and pedestrian network,
	connecting first those communities that already have good local circulation networks
	in place.
	29.4 Coordinate information sharing between
	jurisdictions, to ensure connected routes,
	sharing of effective of ideas, and more
	complete public information.
30 SACOG also gives	30.1 Pursue strategic road expansion that
primary priority to selective	improves congestion and supports effective
road expansion, to support	transit services.
infill development and	30.2 Expect that feasibility and corridor
forestall midday congestion.	studies, project study reports and
	environmental studies will consider high-
	capacity transit investments when examining
	how to provide additional capacity on main
	highway or bridge corridors.
	30.3 Pursue strategic road expansion that
	reduces congestion on access routes to areas

	with significant infill development.  30.4 Give priority for roadway and
	intersection expansion to routes where
	midday demand approaches existing capacity
	or excessive peak period demand threatens to
	spill over into midday, so no part of the
	system fails to function continuously for
	much of the day.
	30.5 Support expansion of trunk arterials that
	provide access to job centers and freeway
	interchanges to provide enough capacity to
	forestall traffic diversion through
	neighborhood streets.
	30.6 Provide technical guidance to local
	agencies and invest regional funds to build
	complete streets projects through designated
	and planned community activity centers, to
	ensure bicycles, pedestrians and transit can
	share the road safely and compatibly with
	autos.
31SACOG intends to inves	
funds that are at SACOG's	E E
discretion, as long as the	quality, community design, transportation
existing funding and	demand management, and bicycle and
program structure remain	
essentially as it is today,	should be proportionally at least as great as
following these policy	programming levels since the regional
guidelines.	programs began in 2003.
ı "	31.2 Continue to help fund regional-scale
	investments that include local projects, with
	the priorities identified below. The funding
	level should be consistent proportionately
	with programming levels since the regional
	programs began in 2003.
	<ul> <li>Main state highways and key trunk</li> </ul>
	arterials that access them, including
	bus and carpool lanes; rail and bus
	transit running with 15 minutes or
	shorter peak frequency, also
	including express commuter
	services; traffic operations
	strategies; crossing of rivers and
	other barriers; and complete streets
	in community activity centers;
	completion of freeway segments (or
	gap closure) including freeway-to-
	freeway connectors;
	<ul> <li>Other key arterial connections,</li> </ul>
	transit dependant services,
	interchange capacity, transit walk
	access, bike and sidewalk
	connections, and port, airport and
	rail access;
	Other major arterials, other transit
	services, improvements to
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	<ul> <li>jurisdictional equity, and retrofit programs;</li> <li>Invest in all three priorities over the life of the plan, considering funding levels available, delivery of projects, and opportunities for funding leverage; and;</li> <li>While investing regional funds for regional objectives, set aside a small proportional share of available money for equity (using local priorities) and secondary goals (such as a retrofit program).</li> </ul>
	31.3 Equity funding to allow local agencies to fund road maintenance and rehabilitation or safety projects with regional funds in lieu of a capacity project.
	<ul> <li>Expect to maintain approximate equity among cities and counties, and within counties, across several funding and program cycles;</li> <li>Evaluate the benefits of the project to the population the project serves as well as the population of submitting jurisdiction; and</li> <li>Equity is primarily determined by</li> </ul>
	identifying the differences between funds received from SACOG and those that would be realized by a formula. Consideration should also include the difference between funds received from all state and federal sources (not just those funds distributed by SACOG) and those that would be realized by formula.

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Scenario Report

Scenario: GPU KOLA AM

Command: Default Command
Volume: GPU KOLA AM
Geometry: existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

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#### Intersection Volume Report Base Volume Alternative -----

Northbound Southbound Eastbound Westbound Node Intersection L -- T -- R L -- T -- R L -- T -- R 1 Township Rd / 0 155 70 85 195 0 0 0 0 65 0 105 2 SR 99 / Rivei 145 695 35 20 835 75 10 15 70 10 30 20 3 Larkin Road / 30 345 20 35 470 15 30 50 10 10 45 25 5 SR 99 / Ramsd 95 1140 250 5 1400 5 5 5 115 260 5 5 1 Township Rd / 3 Larkin Road / 30 345 20 35 470 15 30 50 10 10 45 25 5 SR 99 / Ramsd 95 1140 250 5 1400 5 5 5 115 260 5 5 6 SR 99 / Kola 35 1110 20 95 1430 190 185 135 35 20 135 95 7 Pengtn / Town 20 205 40 70 265 30 65 50 60 20 20 35 8 Pennington Rd 10 40 20 110 40 55 60 130 15 10 65 55 9 Pennington Rd 45 0 165 20 20 20 35 9 Pennington Rd 45 0 165 0 0 0 150 45 115 60 10 Pengtn Rd / N 25 110 255 90 140 35 15 395 45 250 230 135 11 Pengtn Rd / B 90 0 50 0 0 0 590 135 35 515 12 SR 99 / Penni 260 1025 25 75 1305 130 170 305 215 85 360 3.0 13 Pengtn Rd / L 25 145 75 190 135 120 125 280 35 45 225 95 14 Pengtn Rd / 0 0 0 0 95 0 220 110 320 0 0 345 70 15 Pengtn Rd / S 350 60 5 20 60 75 65 30 150 10 100 17 Elm Street / 5 275 5 25 340 30 5 30 5 10 18 SR 99 / Elm S 100 1240 210 25 1590 5 5 50 175 170 20 20 19 SR 99 / Arche 0 1465 225 25 1945 0 0 0 0 45 0 30 20 SR 99 / Colem 0 1125 10 245 1990 0 0 0 0 0 21 SR 99 / Bisho 0 1075 125 30 1970 0 0 0 0 22 township Rd / 0 105 95 80 320 0 0 0 0 23 Larkin Road / 65 105 40 200 160 15 40 180 115 10 245 1990 0 0 0 85 0 330 0 0 0 0 170 0 150 0 0 0 0 105 0 70 0 105 0 70 55 115 140 24 SR 99 / Paseo 325 1110 15 10 1880 40 10 50 430 80 65 15 25 SR 99 / APRIC 210 1255 0 0 1630 350 340 0 210 0 0 0 26 SR 99 / ASH 0 1460 110 15 1850 0 0 0 0 0 110 0 15

#### Impact Analysis Report Level Of Service

Intersection	Base Del/ V/ LOS Veh C	Future Del/ V/ LOS Veh C	Change in
# 1 Township Rd / Riviera Rd	В 13.5 0.000	в 13.5 0.000	+ 0.000 D/V
# 2 SR 99 / Riveira Rd	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 3 Larkin Road / Riviera Road	E 45.2 0.000	E 45.2 0.000	+ 0.000 D/V
# 5 SR 99 / Ramsdell Drive	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 6 SR 99 / Kola Street	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 7 Pengtn / Township	B 13.0 0.601	B 13.0 0.601	+ 0.000 V/C
# 8 Pennington Rd / Luther Rd	C 16.5 0.000	C 16.5 0.000	+ 0.000 D/V
# 9 Pennington Rd / Richard Ave	В 12.2 0.000	B 12.2 0.000	+ 0.000 D/V
# 10 Pengtn Rd / N Street	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 11 Pengtn Rd / Broadway	F 68.4 0.000	F 68.4 0.000	+ 0.000 D/V
# 12 SR 99 / Pennington Rd	F 230.8 1.612	F 230.8 1.612	+ 0.000 D/V
# 13 Pengtn Rd / Larkin Road	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 14 Pengtn Rd / Orchard Rd	E 43.7 0.000	E 43.7 0.000	+ 0.000 D/V
# 15 Pengtn Rd / Sinnard Ave	F 126.8 0.000	F 126.8 0.000	+ 0.000 D/V
# 17 Elm Street / N Street	B 11.8 0.562	в 11.8 0.562	+ 0.000 V/C
# 18 SR 99 / Elm Street	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 19 SR 99 / Archer Ave	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 20 SR 99 / Coleman Rd	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 21 SR 99 / Bishop Ave	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 22 township Rd / Paseo Rd	B 14.8 0.000	B 14.8 0.000	+ 0.000 D/V
# 23 Larkin Road / Paseo Rd	D 26.0 0.844	D 26.0 0.844	+ 0.000 V/C
# 24 SR 99 / Paseo Rd	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 25 SR 99 / APRICOT	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V

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GPU KOLA AM	GPU	KOLA	AM
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2030 GPU NO IMPROVEMENTS 1690-10 LIVE OAK GPU

\_\_\_\_\_ Intersection

Base Future Change
Del/ V/ Del/ V/ in
LOS Veh C LOS Veh C
F OVRFL 0.000 F OVRFL 0.000 + 0.000 D/V

# 26 SR 99 / ASH ST

\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #1 Township Rd / Riviera Rd \* Average Delay (sec/veh): 4.4 Worst Case Level Of Service: B[ 13.5] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R ------| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1! 0 0 Lanes: -----|----||------| Volume Module: Base Vol: 0 155 70 85 195 0 0 0 0 65 0 Initial Bse: 0 155 70 85 195 0 0 0 65 0 105 PHF Volume: 0 172 78 94 217 0 0 0 0 72 0 117 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 172 78 94 217 0 0 0 0 72 0 117 Critical Gap Module: Capacity Module: 211 -----|----|------| Level Of Service Module: \* Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #2 SR 99 / Riveira Rd \* Average Delay (sec/veh): 71.1 Worst Case Level Of Service: F[1064.4] \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - RControl: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include Lanes: 1 0 1 0 1 1 0 1 0 1 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: 145 695 35 20 835 75 10 15 70 10 30 20 Initial Bse: 145 695 35 20 835 75 10 15 70 10 30 20 PHF Adj: PHF Volume: 161 772 39 22 928 83 11 17 78 11 33 22 Reduct Vol: Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 161 772 39 22 928 83 11 17 78 11 33 0 -----||-----|----| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 -----| Capacity Module: Cnflict Vol: 1011 xxxx xxxxx 811 xxxx xxxxx 2114 2106 928 2156 2150 772 Potent Cap.: 674 xxxx xxxxx 802 xxxx xxxxx 37 51 325 35 48 399 5 38 325 Move Cap.: 674 xxxx xxxxx 802 xxxx xxxxx 14 36 399 Volume/Cap: 0.24 xxxx xxxx 0.03 xxxx xxxx 2.17 0.44 0.24 0.79 0.94 0.06 Level Of Service Module: SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 11.9 xxxxx xxxxx 7.2 xxxxx Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 1064 xxxxx xxxxx 606 xxxxx Shared LOS: \* \* \* \* \* \* \* F ApproachDel: xxxxxx xxxxx 1064.4 605.6 ApproachLOS: \* \* F F \* Note: Queue reported is the number of cars per lane. \*

\_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #3 Larkin Road / Riviera Road \* Average Delay (sec/veh): 6.4 Worst Case Level Of Service: E[ 45.2] \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Rights:
 Include
 Include
 Include

 Lanes:
 0 0 1! 0 0
 0 0 1! 0 0
 0 0 1! 0 0
 0 0 1! 0 0
 -----|----|-----||------| Volume Module: 30 345 20 35 470 15 30 50 10 10 45 Initial Bse: 30 345 20 35 470 15 30 50 10 10 45 25 PHF Volume: 33 383 22 39 522 17 33 56 11 11 50 28 Reduct Vol: Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 33 383 22 39 522 17 33 56 11 11 50 -----|----||------||------| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 6.2 3.3 -----| Capacity Module: Cnflict Vol: 539 xxxx xxxxx 406 xxxx xxxxx 1108 1081 531 1103 1078 Potent Cap.: 1019 xxxx xxxxx 1142 xxxx xxxxx 185 216 545 187 217 650 Move Cap.: 1019 xxxx xxxxx 1142 xxxx xxxxx 137 202 545 137 202 650 Volume/Cap: 0.03 xxxx xxxx 0.03 xxxx xxxx 0.24 0.28 0.02 0.08 0.25 0.04 -----| Level Of Service Module: SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 2,8 xxxxx xxxxx 1,6 xxxxx Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 45.2 xxxxx xxxxx 28.6 xxxxx XXXXXX XXXXXX 45.2 ApproachLOS: \* Ε \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU

Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #5 SR 99 / Ramsdell Drive \* Average Delay (sec/veh): 122679.4 Worst Case Level Of Service: F[xxxxx] \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include Lanes: 1 0 1 0 1 1 0 0 1 0 0 0 1! 0 0 0 0 1! 0 0 -----|----||------| Volume Module: Base Vol: 95 1140 250 5 1400 5 5 5 115 260 5 5 Initial Bse: 95 1140 250 5 1400 5 5 5 115 260 5 5 PHF Volume: 106 1267 278 6 1556 6 6 6 128 289 6 6 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 106 1267 278 6 1556 6 6 6 128 289 6 -----| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 -----| Capacity Module: Cnflict Vol: 1561 xxxx xxxxx 1544 xxxx xxxxx 3192 3325 1558 3114 3050 1267 Potent Cap.: 415 xxxx xxxxx 421 xxxx xxxxx 6 8 138 7 13 0 9 3 6 138 Move Cap.: 415 xxxx xxxxx 421 xxxx xxxxx Volume/Cap: 0.25 xxxx xxxx 0.01 xxxx xxxx 2.20 0.91 0.92 xxxx 0.60 0.03 Level Of Service Module: SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 16.3 xxxxx xxxxx 40.3 xxxxx Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1606 xxxxx xxxxx xxxxx xxxxx xxxxxx \* xxxxx F ApproachLOS: म Note: Queue reported is the number of cars per lane. 

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #6 SR 99 / Kola Street \* Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx] \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 1! 0 0 Volume Module: Base Vol: 35 1110 20 95 1430 190 185 135 35 20 135 95 Initial Bse: 35 1110 20 95 1430 190 185 135 35 20 135 95 PHF Volume: 39 1233 22 106 1589 211 206 150 39 22 150 106 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 39 1233 22 106 1589 211 206 150 39 22 150 106 Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 Capacity Module: Cnflict Vol: 1800 xxxx xxxxx 1256 xxxx xxxxx 3356 3239 1694 3322 3333 1244 Potent Cap.: 335 xxxx xxxxx 544 xxxx xxxxx 5 9 115 5 8 212 Move Cap.: 335 xxxx xxxxx 544 xxxx xxxxx 0 7 115 0 6 212 Volume/Cap: 0.12 xxxx xxxx 0.19 xxxx xxxx xxxx22.73 0.34 xxxx26.27 0.50 ~----|----||-----||------| Level Of Service Module: Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx 0 xxxxx xxx 0 xxxxApproachDel: xxxxxx xxxxxx xxxxxx F \* \* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #7 Pengtn / Township \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.601 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: 0 Level Of Service: \* Street Name: Pennington Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R Movement: L - T - R -----|----|-----||------||------| Volume Module: Base Vol: 20 205 40 70 265 30 65 50 60 20 20 35 Initial Bse: 20 205 40 70 265 30 65 50 60 20 20 35 PHF Adj: -----| Saturation Flow Module: Lanes: 0.08 0.77 0.15 0.19 0.73 0.08 0.37 0.29 0.34 0.27 0.27 0.46 Final Sat.: 49 506 99 129 490 55 214 164 197 143 143 249 Capacity Analysis Module: Vol/Sat: 0.45 0.45 0.45 0.60 0.60 0.34 0.34 0.34 0.16 0.16 0.16 Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* LOS by Move: B B B C C B
12.2
Delay Adj: 1.00
ApprAdjDel: 10
LOS by 2 C B B B A A 11.3 15.2 9.8 1.00 1.00 1.00 ApprAdjDel: 12.2 LOS by Appr: B 15.2 11.3 9.8 C В AllWayAvgQ: 0.7 0.7 0.7 1.3 1.3 1.3 0.4 0.4 0.4 0.1 0.1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

## 1690-10 LIVE OAK GPU

\_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #8 Pennington Rd / Luther Rd \* Average Delay (sec/veh): 7.9 Worst Case Level Of Service: C[ 16.5] \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-RMovement: -----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----|----|-----||------| Volume Module: Base Vol: 10 40 20 110 40 55 60 130 15 10 65 Initial Bse: 10 40 20 110 40 55 60 130 15 10 65 55 PHF Volume: 11 44 22 122 44 61 67 144 17 11 72 61 Reduct Vol: 0 0 0 0 0 0 0 0 0 FinalVolume: 11 44 22 122 44 61 67 144 17 11 72 Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----| Capacity Module: Cnflict Vol: 464 442 153 444 419 103 133 xxxx xxxxx 161 xxxx xxxxx Potent Cap.: 512 513 899 524 525 952 1433 xxxx xxxxx 1400 xxxx xxxxx Move Cap.: 427 484 899 455 496 952 1433 xxxx xxxxx 1400 xxxx xxxxx Volume/Cap: 0.03 0.09 0.02 0.27 0.09 0.06 0.05 xxxx xxxx 0.01 xxxx xxxxx Level Of Service Module: LOS by Move: \* \* \* \* \* \* A \* \* A \* \* Movement: LT - LTR - RT xxxxxx ApproachDel: 12.7 16.5 ApproachLOS: B XXXXXX Note: Queue reported is the number of cars per lane. 

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #9 Pennington Rd / Richard Ave \* 6.0 Worst Case Level Of Service: B[ 12.2] Average Delay (sec/veh): Street Name: Richard Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|-----||-------||-------| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include 

 Rights:
 Include
 Include
 Include

 Lanes:
 0 0 1! 0 0 0 0 0 0 0 0 0 0 1 0

 Include 0 1 0 0 0 Volume Module: Base Vol: 45 0 165 0 0 0 150 45 115 60 0 Initial Bse: 45 0 165 0 0 0 0 150 45 115 60 0 PHF Volume: 50 0 183 0 0 0 0 167 50 128 67 0 Reduct Vol: 0 0 0 0 0 0 0 0 167 50 128 67 0 FinalVolume: 50 0 183 0 0 0 0 167 50 128 67 0 -----| Critical Gap Module: -----|----||------||------| Capacity Module: -----|----||------||------| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* LT - LTR - RT LT - LTR - RT LT - LTR - RT Movement: LT - LTR - RT Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #10 Pengtn Rd / N Street \* Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F(xxxxx) Street Name: N Street Pennington Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-RL - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----||-----|-----| Volume Module: Base Vol: 25 110 255 90 140 35 15 395 45 250 230 Initial Bse: 25 110 255 90 140 35 15 395 45 250 230 135 PHF Volume: 28 122 283 100 156 39 17 439 50 278 256 150 Reduct Vol: Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 28 122 283 100 156 39 17 439 50 278 256 150 -----|----|-----||------| Critical Gap Module: Capacity Module: Volume/Cap: xxxx 1.38 0.47 xxxx 1.64 0.05 0.01 xxxx xxxx 0.26 xxxx xxxx -----| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* A \* \* A \* \* \* Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT 
 Shared LOS:
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 <td Note: Queue reported is the number of cars per lane. 

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #11 Pength Rd / Broadway \* Average Delay (sec/veh): 7.0 Worst Case Level Of Service: F[ 68.4] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Pennington Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-RL - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Rights: Include Includ Volume Module: Base Vol: 90 0 50 0 0 0 0 590 135 35 515 Initial Bse: 90 0 50 0 0 0 590 135 35 515 0 PHF Volume: 100 0 56 0 0 0 0 656 150 39 572 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 100 0 56 0 0 0 0 656 150 39 572 0 Critical Gap Module: <del>-----</del>|----||-----||-----| Capacity Module: Level Of Service Module: Note: Queue reported is the number of cars per lane. 

\_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #12 SR 99 / Pennington Rd Cycle (sec): Critical Vol./Cap.(X): 1.612 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec Optimal Cycle: 180 Level Of Service: 12 (Y+R=4.0 sec) Average Delay (sec/veh): \*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R-----|-----||-------| -----|----|-----| Volume Module: Base Vol: 260 1025 25 75 1305 130 170 305 215 85 360 Initial Bse: 260 1025 25 75 1305 130 170 305 215 85 360 30 Saturation Flow Module: Adjustment: 0.90 0.95 0.81 0.90 0.95 0.81 0.93 0.92 0.92 0.93 0.97 0.97 Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 0.59 0.41 1.00 0.92 0.08 Final Sat.: 1718 1809 1537 1718 1809 1537 1769 1024 722 1769 1698 142 Capacity Analysis Module: Vol/Sat: 0.17 0.63 0.02 0.05 0.80 0.09 0.11 0.33 0.33 0.05 0.24 0.24 Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* Green/Cycle: 0.10 0.56 0.56 0.04 0.50 0.50 0.07 0.21 0.21 0.03 0.16 0.16 Note: Queue reported is the number of cars per lane.

NO IMPROVEMENTS 1690-10 LIVE OAK GPU														
Lovel Of Committee Committee Description								-						
Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)														
*****	****	****	*****	****	****	*****	****	* * * * *	*****	*****	****	****	k	
Intersection							*****	****	*****	*****	****	*****	*	
Average Dela														
Average Delay (sec/veh): 818.1 Worst Case Level Of Service: F[2563.6]								÷						
Approach:		rth B			uth B			ast B			est B			
Movement:			- R			- R			- R		– T		ı	
Control:	' s	top S	ign	Stop Sign			Un	Uncontrolled			Uncontrolled			
Rights:		Incl	ude	Include		Include			Include					
Lanes:			0 0			0 0			0 0		0 1!			
Volume Modul					<b>-</b>								1	
Base Vol:	e. 25	145	75	190	135	120	125	280	35	45	225	95		
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse:	25	145	75	190	135	120	125	280	35	45	225	95		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:		0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90	0.90		
PHF Volume:	28		83	211	150	133	139	311	39	50	250	106		
Reduct Vol:	0	-	0	0	0	0	0	0	0	•	0	0		
FinalVolume:			83	211	150	133	139	311	39	50	250	106	i	
Critical Gap	,										<b></b>		J	
Critical Gp:			6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx		
FollowUpTim:			3.3	3.5	4.0	3.3			xxxxx			xxxxx		
	•		<del>-</del>						<b>-</b>					
Capacity Mod Cnflict Vol:		1004	2 2 1	1133	1021	202	25.6			250				
Potent Cap.:		223	331 711	180	1031 233	303 737			XXXXX			XXXXX		
Move Cap.:			711	38	195	737			XXXXX			XXXXX		
Volume/Cap:		0.86	0.12	5.51	0.77	0.18			xxxx		xxxx			
											<b></b>			
Level Of Serv														
2Way95thQ: Control Del::			xxxxx			xxxxx			xxxxx			XXXXX		
LOS by Move:		*	*	*	*	*	0.4 A	xxxx *	xxxxx *	8.1 A	xxxx *	*****		
Movement:			- RT		- LTR				- RT		- LTR			
Shared Cap.:	xxxx	174	xxxxx			xxxxx			xxxxx			xxxxx		
SharedQueue:														
Shrd ConDel::					2564	xxxxx						xxxxx		
Shared LOS:		-	*	*	-	*	*			*	*	*		
ApproachDel: ApproachLOS:	•	329.8 F		25	563.6 F		X	XXXXX *		XX	xxxxx			
**************************************							t							
Note: Queue reported is the number of cars per lane. ************************************							ŧ							

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\* Intersection #14 Pength Rd / Orchard Rd \* Average Delay (sec/veh): 12.7 Worst Case Level Of Service: E[ 43.7] \* Street Name: Pennington Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R-----|----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 1! 0 0 0 1 0 0 0 0 0 0 1 0 ------|----|-----||------| Volume Module: Base Vol: 0 0 0 95 0 220 110 320 0 0 345 Initial Bse: 0 0 0 95 0 220 110 320 0 0 345 PHF Volume: 0 0 0 106 0 244 122 356 0 0 383 78 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 0 0 106 0 244 122 356 0 0 383 78 -----| Critical Gap Module: Capacity Module: Cnflict Vol: 1144 1061 356 1022 1022 422 461 xxxx xxxxx xxxx xxxx xxxxx xxxxx Potent Cap.: 177 224 688 261 236 631 1100 xxxx xxxxx xxxx xxxx xxxxx Move Cap.: 98 197 688 238 208 631 1100 xxxx xxxxx xxxx xxxx xxxx xxxxx Volume/Cap: 0.00 0.00 0.00 0.44 0.00 0.39 0.11 xxxx xxxx xxxx xxxx xxxx -----||----||-----||------| Level Of Service Module: SharedQueue:xxxxx xxxx xxxxx xxxxx 7.9 xxxxx 0.4 xxxx xxxxx xxxx xxxx xxxxx xxxxx Shrd ConDel:xxxxx xxxx xxxxx xxxxx 43.7 xxxxx 8.7 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

\_\_\_\_\_\_ 2030 GPU

## NO IMPROVEMENTS

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #15 Pengtn Rd / Sinnard Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 58.5 Worst Case Level Of Service: F[126.8] \*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Pennington Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - RL - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 350 60 5 20 60 75 65 30 150 10 100 Initial Bse: 350 60 5 20 60 75 65 30 150 10 100 20 PHF Volume: 389 67 6 22 67 83 72 33 167 11 111 22 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 389 67 6 22 67 83 72 33 167 11 111 22 -----| Critical Gap Module: Capacity Module: Cnflict Vol: 481 417 117 442 489 122 133 xxxx xxxxx 200 xxxx xxxxx Potent Cap.: 496 527 935 526 480 929 1451 xxxx xxxxx 1372 xxxx xxxxx Move Cap.: 382 495 935 448 451 929 1451 xxxx xxxxx 1372 xxxx xxxxx Volume/Cap: 1.02 0.13 0.01 0.05 0.15 0.09 0.05 xxxx xxxx 0.01 xxxx xxxx -----|----|-----|------| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* A \* \* A \* \* \* Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT \*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #17 Elm Street / N Street \* Cycle (sec): 100 Critical Vol./Cap.(X): Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: 11.8 0 Level Of Service: \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| -----|----|-----||------||------| Volume Module: Base Vol: 5 275 5 25 340 30 5 30 5 10 15 Initial Bse: 5 275 5 25 340 30 5 30 5 10 15 30 Saturation Flow Module: Lanes: 0.02 0.96 0.02 0.06 0.86 0.08 0.12 0.75 0.13 0.18 0.27 0.55 Final Sat.: 13 723 13 49 672 59 71 425 71 108 163 325 Capacity Analysis Module: Vol/Sat: 0.42 0.42 0.42 0.56 0.56 0.56 0.08 0.08 0.08 0.10 0.10 0.10 Crit Moves: \*\*\*\* \*\*\*\* \* \* \* \* Delay/Veh: 10.9 10.9 10.9 13.0 13.0 13.0 9.0 9.0 9.0 8.9 8.9 LOS by Move: B B B B B A A A A A ApproachDel: 13.0 10.9 9.0 8.9 1.00 Delay Adj: ApprAdjDel: 1.00 1.00 1.00 13.0 9.0 ApprAdjDel: 10.9 LOS by Appr: B 8.9 Α Α AllWayAvgQ: 0.7 0.7 0.7 1.2 1.2 1.2 0.1 0.1 0.1 0.1 0.1 \*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

## 2030 GPU NO IMPROVEMENTS 1690-10 LIVE ONK CRI

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #18 SR 99 / Elm Street \* Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx] \*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - RControl: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 0 1 0 1 0 0 1 0 0 0 1! 0 0 0 0 1! 0 0 -----|----||-------| Volume Module: Base Vol: 100 1240 210 25 1590 5 5 50 175 170 20 Initial Bse: 100 1240 210 25 1590 5 5 50 175 170 20 PHF Volume: 111 1378 233 28 1767 6 6 56 194 189 22 22 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 111 1378 233 28 1767 6 6 56 194 189 22 0 Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 -----||-----||-----| Capacity Module: Cnflict Vol: 1772 xxxx xxxxx 1611 xxxx xxxxx 3564 3658 1769 3667 3544 1494 Potent Cap.: 344 xxxx xxxxx 397 xxxx xxxxx 3 5 103 3 6 151 Move Cap.: 344 xxxx xxxxx 397 xxxx xxxxx 0 3 103 0 4 151 Volume/Cap: 0.32 xxxx xxxx 0.07 xxxx xxxx xxxx xxxx17.90 1.88 xxxx 6.00 0.15 3 6 151 -----|----| Level Of Service Module: LOS by Move: C \* \* B \* \* \* \* \* \* \* Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx 0 xxxxx xxxxxx xxxxxx xxxxxx ApproachDel: xxxxxx ApproachLOS: \* F \* Note: Queue reported is the number of cars per lane.

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #19 SR 99 / Archer Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 163.3 Worst Case Level Of Service: F[8128.1] \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 0 1465 225 25 1945 0 0 0 0 45 0 Initial Bse: 0 1465 225 25 1945 0 0 0 45 0 30 PHF Volume: 0 1628 250 28 2161 0 0 0 0 50 0 33 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1628 250 28 2161 0 0 0 0 50 0 33 Critical Gap Module: FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxx xxxxx 3.5 4.0 3.3 Capacity Module: 

 Potent Cap.:
 xxxx xxxx xxxx xxxx
 312 xxxx xxxx xxxx
 xxxx xxxx xxxx
 3 3 106

 Move Cap.:
 xxxx xxxx xxxx
 312 xxxx xxxx
 xxxx xxxx xxxx
 3 3 106

 Volume/Cap:
 xxxx xxxx xxxx
 xxxx xxxx
 xxxx xxxx
 xxxx xxxx
 xxxx xxxx
 15.71 0.00 0.31

 Level Of Service Module: LOS by Move: \* \* \* C \* \* \* \* \* \* \* \* \* \* \* \* \* Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT ApproachLOS: xxxxxx \*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #20 SR 99 / Coleman Rd \* Average Delay (sec/veh): 2535.5 Worst Case Level Of Service: F[23113.8] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - RControl: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 0 1125 10 245 1990 0 0 0 85 0 330 Initial Bse: 0 1125 10 245 1990 0 0 0 85 0 PHF Volume: 0 1250 11 272 2211 0 0 0 0 94 0 367 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1250 11 272 2211 0 0 0 0 94 0 367 Critical Gap Module: Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 ------|----|-----|-----| Capacity Module: Level Of Service Module: LOS by Move: \* \* \* C \* \* \* \* \* \* \* \* \* \* Movement: LT - LTR - RT xxxxxx xxxxxx ApproachDel: xxxxx ApproachLOS: \* F \* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #21 SR 99 / Bishop Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 1237.9 Worst Case Level Of Service: F[13615.6] \* Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R-----| Volume Module: Base Vol: 0 1075 125 30 1970 0 0 0 170 0 Initial Bse: 0 1075 125 30 1970 0 0 0 170 0 150 PHF Volume: 0 1194 139 33 2189 0 0 0 0 189 0 167 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1194 139 33 2189 0 0 0 0 189 0 167 -----| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxx xxxxx 3.5 4.0 3.3 Capacity Module: Level Of Service Module: LOS by Move: \* \* \* B \* \* \* \* \* \* \* \* Movement: LT - LTR - RT \*

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Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #22 township Rd / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[ 14.8] \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 0 1 0 0 1 0 0 0 0 1! 0 0 0 0 1! 0 0 Volume Module: Base Vol: 0 105 95 80 320 0 0 0 105 0 70 Initial Bse: 0 105 95 80 320 0 0 0 105 0 70 PHF Volume: 0 105 95 80 320 0 0 0 105 0 70 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 105 95 80 320 0 0 0 0 105 0 70 -----|----| Critical Gap Module: Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 -----|----|-----|------| Capacity Module: -----| Level Of Service Module: Control Del:xxxxx xxxx xxxxx Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx 0 xxxxx xxxx 540 xxxxx SharedQueue:xxxxx xxxx xxxxx 0.2 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1.4 xxxxx Shrd ConDel:xxxxx xxxx xxxxx 7.8 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 14.8 xxxxx ApproachDel: xxxxx ApproachLOS: \* В \* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #23 Larkin Road / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: 26.0 \* Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-RVolume Module: Base Vol: 65 105 40 200 160 15 40 180 115 55 115 Initial Bse: 65 105 40 200 160 15 40 180 115 55 115 140 Saturation Flow Module: ------| Capacity Analysis Module: Vol/Sat: 0.55 0.55 0.55 0.84 0.84 0.84 0.76 0.76 0.76 0.71 0.71 0.71 Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* Delay/Veh: 17.2 17.2 17.2 34.2 34.2 34.2 25.5 25.5 25.5 22.7 22.7 22.7 AdjDel/Veh: 17.2 17.2 17.2 34.2 34.2 34.2 25.5 25.5 25.5 22.7 22.7 22.7 LOS by Move: C C C D D D D C C C ApproachDel: 17.2 34.2 25.5 22.7 Delay Adj: ApprAdjDel: 1.00 1.00 1.00 1.00 34.2 25.5 ApprAdjDel: 17.2 34.2 25.5 22.7 LOS by Appr: C D D C AllWayAvgQ: 0.8 0.8 0.8 3.3 3.3 3.3 2.1 2.1 2.1 1.7 1.7 \*

Traffix 7.9.0415 (c) 2007 Dowling Assoc. Licensed to kdANDERSON TRANSP.

\*

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report											
2000 HCM Unsignalized Method (Base Volume Alternat:											
Intersection #24 SR 99 / Paseo Rd	*******										
**************************************	*****										
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Set											
Approach: North Bound South Bound East Bound	West Bound										
Movement: L - T - R L - T - R	L - T - R										
Control: Uncontrolled Uncontrolled Stop Sign	Stop Sign										
Rights: Include Include Include	Include										
Lanes: 1 0 0 1 0 1 0 1 0 1 0 0 1! 0 0	0 0 1! 0 0										
Volume Module:	00 65 45										
Base Vol: 325 1110 15 10 1880 40 10 50 430 Growth Adi: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	80 65 15 1.00 1.00 1.00										
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00 80 65 15										
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00										
PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	0.90 0.90 0.90										
PHF Volume: 361 1233 17 11 2089 44 11 56 478	89 72 17										
Reduct Vol: 0 0 0 0 0 0 0 0	0 0 0										
FinalVolume: 361 1233 17 11 2089 44 11 56 478	89 72 17										
Critical Gap Module:											
Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2	7.1 6.5 6.2										
FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3	3.5 4.0 3.3										
Constitut Modulo:											
Capacity Module: Cnflict Vol: 2133 xxxx xxxxx 1250 xxxx xxxxx 4119 4083 2089	4364 4119 1242										
Potent Cap.: 248 xxxx xxxxx 547 xxxx xxxxx 1 3 66	1 2 213										
Move Cap.: 248 xxxx xxxxx 547 xxxx xxxxx 0 0 66	0 0 213										
Volume/Cap: 1.46 xxxx xxxx 0.02 xxxx xxxx xxxx xxxx 7.22	xxxx xxxx 0.08										
Level Of Service Module:											
2Way95thQ: 20.7 xxxx xxxxx 0.1 xxxx xxxxx xxxx xxxx xxx											
Control Del:263.8 xxxx xxxxx 11.7 xxxx xxxxx xxxxx xxxxx xxxxx											
LOS by Move: F * * B * * * * *	* * *										
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT	LT - LTR - RT										
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	xxxxx 0 xxxxx										
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx											
Shared LOS: * * * * * * * * * *	* * *										
ApproachDel: xxxxxx xxxxx xxxxx	xxxxx										
ApproachLOS: * * F F											
***************	******										
Note: Queue reported is the number of cars per lane. ************************************											

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #25 SR 99 / APRICOT Average Delay (sec/veh): 610900.4 Worst Case Level Of Service: F[xxxxx] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* APRICOT APRICOT

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R -----|----|-----|------| Volume Module: Base Vol: 210 1255 0 0 1630 350 340 0 210 0 Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx xxxxx xxxx xxxxx 6.4 6.5 6.2 xxxxx xxxx xxxxx FollowUpTim: 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 xxxxx xxxx xxxxx Capacity Module: -----| Level Of Service Module: Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxxx xxxx 0 xxxxx xxxx xxxx xxxxx SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 79.3 xxxxx xxxx xxxx xxxx 

Note: Queue reported is the number of cars per lane.

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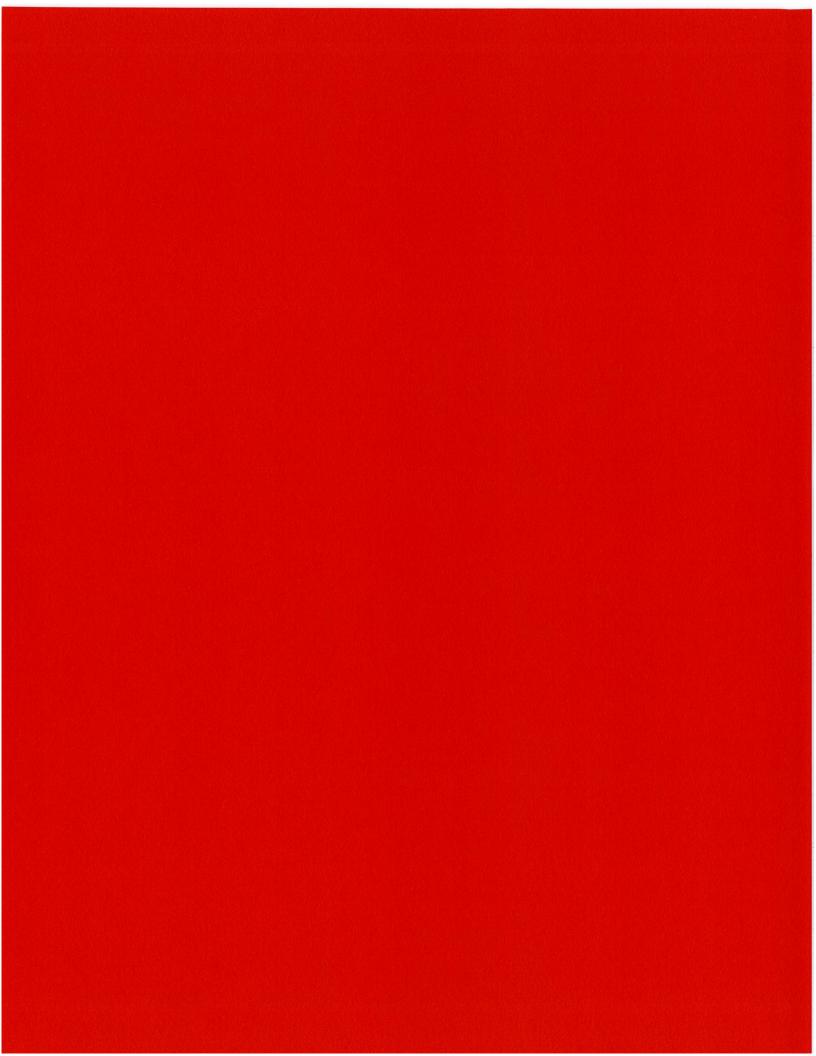
1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #26 SR 99 / ASH ST \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 425.1 Worst Case Level Of Service: F[12104.7] \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|-----|------||-------||-------| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 1 0 1 1 0 1 0 0 0 0 0 0 0 0 0 1! 0 0 -----|----|-----| Volume Module: Base Vol: 0 1460 110 15 1850 0 0 0 0 110 0 Initial Bse: 0 1460 110 15 1850 0 0 0 110 0 15 PHF Volume: 0 1622 122 17 2056 0 0 0 0 122 0 17 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1622 122 17 2056 0 0 0 0 122 0 17 Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 Capacity Module: 

 Potent Cap.:
 xxxx xxxx xxxx
 352 xxxx xxxx
 xxxx xxxx xxxx
 5
 5
 127

 Move Cap.:
 xxxx xxxx xxxx
 352 xxxx xxxx
 xxxx xxxx xxxx
 5
 4
 127

 Volume/Cap:
 xxxx xxxx xxxx
 xxxx xxxx
 xxxx xxxx
 xxxx xxxx
 24.90 0.00 0.13

 -----|----|-----|------| Level Of Service Module: Movement: LT - LTR - RT \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*



2030 GPU NO IMPROVEMENTS 1690-10 LIVE OAK GPU

Scenario Report

Scenario:

GPU KOLA PM

Default Command

Command:

Volume:

GPU KOLA PM

Geometry:

Impact Fee:

Trip Generation:

Trip Distribution:

Paths:

Routes:

Configuration:

Default Command

GPU KOLA PM

existing

Default Impact Fee

Default Trip Generation

Default Trip Distribution

Default Path

Default Route

Configuration:

Default Configuration

#### \_\_\_\_\_\_\_\_\_\_\_\_ 2030 GPU NO IMPROVEMENTS 1690-10 LIVE OAK GPU

#### Intersection Volume Report Base Volume Alternative

			Northbound			Southbound			stbou		Westbound		
Node	Intersection	L,	T -	- R	ь.	T -	R	L -	- T -	R	L -	- T -	- R
1	Township Rd /	0	215	90	240	240	0	0	0	0	105	0	75
2	SR 99 / Rivei	90	1080	25	10	770	10	85	55	140	15	35	15
3	Larkin Road /	30	550	20	35	540	15	30	40	20	30	35	5
5	SR 99 / Ramsd	40	1585	395	35	1265	5	15	80	85	470	60	35
6	SR 99 / Kola	110	1755	25	150	1405	325	295	150	50	25	160	75
7	Pengtn / Town	45	365	65	35	235	35	60	45	20	45	75	35
8	Pennington Rd	10	40	10	55	45	65	60	50	10	20	130	110
9	Pennington Rd	60	0	135	0	0	0	0	55	55	175	145	0
10	Pengtn Rd / N	50	180	265	130	170	45	45	195	35	290	165	125
11	Pengtn Rd / B	75	0	115	0	0	0	0	470	120	85	800	0
12	SR 99 / Penni	210	1470	40	35	1300	180	310	120	195	135	175	50
13	Pengtn Rd / L	40	280	50	185	185	250	105	115	20	30	140	90
14	Pengtn Rd / O	0	0	0	130	0	175	120	170	0	0	115	160
15	Pengtn Rd / S	105	35	5	15	35	105	95	60	115	5	100	15
17	Elm Street /	5	365	40	5	270	15	5	5	5	45	25	50
18	SR 99 / Elm S	180	1550	190	15	1615	5	5	15	140	180	15	15
19	SR 99 / Arche	0	1905	200	10	2060	0	0	0	0	80	0	15
20	SR 99 / Colem	0	2005	120	565	1615	0	0	0	0	40	0	245
21	SR 99 / Bisho	0	1840	205	130	1595	0	0	0	0	95	0	70
22	township Rd /	0	350	105	65	205	0	0	0	0	95	0	70
23	Larkin Road /	75	225	30	70	195	45	65	155	40	80	80	175
24	SR 99 / Paseo	613	2035	100	10	1550	5	10	45	245	120	75	95
25	SR 99 / APRIC	195	1780	0	0	1785	360	360	0	195	0	0	0
26	SR 99 / ASH	0	1970	115	10	1990	0	0	0	0	115	0	10

#### Impact Analysis Report Level Of Service

Intersection	Base Del/ V/	Future Del/ V/	Change in
# 1 Township Rd / Riviera Rd	LOS Veh C E 35.0 0.000	LOS Veh C E 35.0 0.000	+ 0.000 D/V
# 2 SR 99 / Riveira Rd	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 3 Larkin Road / Riviera Road	F 72.4 0.000	F 72.4 0.000	+ 0.000 D/V
# 5 SR 99 / Ramsdell Drive	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 6 SR 99 / Kola Street	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 7 Pengtn / Township	C 16.9 0.756	C 16.9 0.756	+ 0.000 V/C
# 8 Pennington Rd / Luther Rd	B 14.1 0.000	в 14.1 0.000	+ 0.000 D/V
# 9 Pennington Rd / Richard Ave	B 12.5 0.000	B 12.5 0.000	+ 0.000 D/V
# 10 Pengtn Rd / N Street	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 11 Pengtn Rd / Broadway	F 93.7 0.000	F 93.7 0.000	+ 0.000 D/V
# 12 SR 99 / Pennington Rd	F 207.2 1.430	F 207.2 1.430	+ 0.000 D/V
# 13 Pengtn Rd / Larkin Road	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 14 Pengtn Rd / Orchard Rd	C 18.9 0.000	C 18.9 0.000	+ 0.000 D/V
# 15 Pengtn Rd / Sinnard Ave	C 20.0 0.000	C 20.0 0.000	+ 0.000 D/V
# 17 Elm Street / N Street	B 11.8 0.565	в 11.8 0.565	+ 0.000 V/C
# 18 SR 99 / Elm Street	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 19 SR 99 / Archer Ave	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 20 SR 99 / Coleman Rd	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 21 SR 99 / Bishop Ave	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 22 township Rd / Paseo Rd	C 18.8 0.000	C 18.8 0.000	+ 0.000 D/V
# 23 Larkin Road / Paseo Rd	C 20.2 0.697	C 20.2 0.697	+ 0.000 V/C
# 24 SR 99 / Paseo Rd	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 25 SR 99 / APRICOT	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V

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2030 GPU NO IMPROVEMENTS 1690-10 LIVE OAK GPU

\_\_\_\_\_

Base Future Change
Del/ V/ Del/ V/ in
LOS Veh C LOS Veh C
F OVRFL 0.000 F OVRFL 0.000 + 0.000 D/V Intersection

# 26 SR 99 / ASH ST

1690-10 LIVE OAK GPU											
Level 6	of Service Comput	abian Danaub									
		ation Report e Volume Alternat.	inol								
************************											
Intersection #1 Township Rd /	' Riviera Rd										
*******************		*****	* * * * * * * * * * * * * * * * * * *								
Average Delay (sec/veh):	8.7 Worst	Case Level Of Se	rvice: El 35.01								
*******											
Street Name:		Riv	iera								
Approach: North Bound	South Bound	East Bound	West Bound								
Movement: L - T - R	L - T - R	L - T - R	L - T - R								
Control: Uncontrolled	Uncontrolled	Stop Sign	Stop Sign								
Rights: Include	Include	Include	Include								
Lanes: 0 0 0 1 0	0 1 0 0 0	0 0 0 0 0	0 0 1! 0 0								
Volume Module:											
Base Vol: 0 215 90	240 240 0	0 0 0	105 0 75								
Growth Adj: 1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
Initial Bse: 0 215 90	240 240 0	0 0 0	105 0 75								
User Adj: 1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
PHF Adj: 0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95								
PHF Volume: 0 226 95	253 253 0		111 0 79								
Reduct Vol: 0 0 0	0 0 0		0 0 0								
FinalVolume: 0 226 95	253 253 0	0 0 0	111 0 79								
Outstand One Wadel											
Critical Gap Module:	4 1		646563								
Critical Gp:xxxxx xxxx xxxxx FollowUpTim:xxxxx xxxx xxxx		XXXXX XXXX XXXXX	6.4 6.5 6.2 3.5 4.0 3.3								
Capacity Module:	1	11									
Cnflict Vol: xxxx xxxx xxxxx	321 xxxx xxxxx	xxxx xxxx xxxxx	1032 1032 274								
Potent Cap.: xxxx xxxx xxxx	1239 xxxx xxxxx		258 233 765								
Move Cap.: xxxx xxxx xxxx	1239 xxxx xxxxx										
Volume/Cap: xxxx xxxx xxxx	0.20 xxxx xxxx										
Level Of Service Module:	1										
2Way95thQ: xxxx xxxx xxxxx	0.8 xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx								
Control Del:xxxxx xxxx xxxxx	8.6 xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx								
LOS by Move: * * *	A * *	* * *	* * *								
Movement: LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT								
Shared Cap.: xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxx	xxxx 302 xxxxx								
SharedQueue:xxxxx xxxx xxxxx	0.8 xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx 3.9 xxxxx								
Shrd ConDel:xxxxx xxxx xxxxx	8.6 xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx 35.0 xxxxx								
Shared LOS: * * *	A * *	* * *	* E *								
ApproachDel: xxxxxx	ApproachDel: xxxxx xxxxx xxxxx 35.0										
ApproachLOS: *	Approactions;										
*****			* * * * * * * * * * * * * * * * * * *								
Note: Queue reported is the n			******								

		]	Level (	of Ser	vice (	Computa	ation 1	Repor	t			
2	2000		nsignal							ive)		
*****											* * * * *	*****
Intersection	#2 S	R 99	/ Rive:	ira Rd								
*****	****	****	* * * * * * *	* * * * * *	****	* * * * * *	*****	****	* * * * * *	* * * * * *	****	*****
Average Delay					* * * * * *				Of Ser			
Approach:	No	rth B	Sund	Sou	uth Bo	bruc	E	ast Bo	าเทศ	TATE	est Bo	bund
Movement:	L		- R						- R			- R
Control:				Unc						្ត នៅ		
Rights:		Incl			Incl		-	Incl			Inclu	
Lanes:	1		0 1	1 (			0		0 0	0 0		
Volume Module				1 1			1 1			1 1		'
Base Vol: 90 1080 25 10 770 10 85 55 140 15 35 15												
Growth Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		1080	25	10	770	10	85	55	140	15	35	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adi:		0.95	0.95		0.95	0.95		0.95	0.95	0.95	0.95	0.95
PHF Volume:		1137	26	11	811	11	89	58	147	16	37	16
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
FinalVolume:	_	1137	26	11	-	11	89	58	147	16	37	16
										11		
Critical Gp:			xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:			xxxxx			xxxxx		4.0	3.3	3.5	4.0	3.3
Capacity Modu				' '			' '			' '		'
		xxxx	xxxxx	1163	xxxx	xxxxx	2197	2184	811	2266	2168	1137
Potent Cap.:			xxxxx	590	xxxx	xxxxx	32	46	380	29	47	246
Move Cap.:	795	xxxx	xxxxx	590	xxxx	xxxxx	6	40	380	0	41	246
Volume/Cap:			xxxx		xxxx	xxxx	15.23	1.46	0.39	xxxx	0.91	0.06
											<b></b>	
Level Of Serv	zice I	Module	e:	, ,								,
2Way95thQ:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.1	xxxx	xxxxx	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	В	*	*	В	*	*	*	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	17	xxxxx	xxxx	0	xxxxx
SharedQueue:					xxxx	xxxxx	xxxxx	37.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:												
Shared LOS:	*	*	*		*		*		*	*	*	*
ApproachDel:	x	xxxxx		x	xxxxx		7	664.1		x	xxxxx	
ApproachLOS:		*			*			F			F	
******	****	****	* * * * * *	*****	****	*****	* * * * * *	* * * * *	* * * * * * *	****	* * * * *	*****
Note: Queue reported is the number of cars per lane.												

GPU KOLA PM Tue Sep 15, 2009 13:32:02 Page 6-1

#### 2030 GPU NO IMPROVEMENTS 1690-10 LIVE OAK GPU

		]	Level (	of Serv	vice (	Computa	ation 1	Report	t			
2	2000	HCM U	nsignal	lized D	Method	d (Base	e Volu	me Al	ternat:	ive)		
*****	* * * * *	****	* * * * * *	*****	* * * * * *	*****	*****	* * * * *	*****	*****	****	* * * * * *
Intersection							* * * * * *	* * * * *	* * * * * *	****	+***	*****
Average Delay					* * * * * *				Of Sei			
Approach:		rth B			ath Bo			ast Bo			est Bo	
Movement:	L		- R			- R			- R		- Т	
movement:												
	•			Und					ign			
Rights:	OII	Incl		OII	Incl			_	ıde		Inclu	
Lanes:	Λ	0 1!		0 /	111010		0 (		0 0	0 0	111010	
nanes.												
Volume Module	,		,	1 1			1 1			1 1		1
Base Vol:	30	550	20	35	540	15	30	40	20	30	35	5
Growth Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	30		20	35	540	1.5	30	40	20	30	35	5
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:		0.95	0.95		0.95	0.95		0.95	0.95	0.95		0.95
PHF Volume:	32	579	21	37	568	16	32	42	21	32	37	5
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
FinalVolume:			21	37	568	16	32		21	32	37	5
											3 /	) 
				4 1			7.1	6.5	6.2	7.1	6.5	6.2
Critical Gp:						XXXXX		4.0	3.3	3.5	4.0	3.3
FollowUpTim:			xxxxx			XXXXX			٠.٠	J.5	4.0	ا
Campaitu Madu	'											
Capacity Modu				<b>600</b>			1204	1213	576	1224	1 2 1 1	E00
Cnflict Vol:			xxxxx			xxxxx		1313	576	1334		589
Potent Cap.:			xxxxx			xxxxx	132	157	513	130	157	504
Move Cap.:			xxxxx			xxxxx	100	146	513	92	146	504
Volume/Cap:			xxxx		xxxx			0.29	0.04		0.25	0.01
!	ı								<del></del>			
Level Of Serv				0 1								**********
2Way95thQ:			xxxxx						XXXXX			
Control Del:		XXXX *	xxxxx *		**	*****	*	XXXX *	xxxxx *	**	xxxx	****
LOS by Move:	A			A								
Movement:		- LTR				- RT		- LTR			- LTR	
Shared Cap.:						xxxxx			xxxxx	XXXX		xxxxx
SharedQueue:									xxxxx			xxxxx
Shrd ConDel:										*****		xxxxx
Shared LOS:	*	*	*	*		*	*	F	*	*	F	*
ApproachDel:	x	xxxxx		X	xxxxx			66.1			72.4	
ApproachLOS:		*		n de de de la	*	raas ee		F			F	Labaratoro o
************												
Note: Queue reported is the number of cars per lane.												

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		Of Service	_	_								
200(		alized Metho					******					
Intersection #5	SR 99 / Ran	sdell Drive										
Average Delay (s	sec/veh): OV	ERFLOW	Worst	Case Level	Of Ser	rvice: F[xx	xxx]					
	North Bound	South B		East B	_	West B						
L L	- T - F						- R					
		-			_ <b></b>							
Control: (	Incontrolled	l 'Unconti	colled	Stop S	ign	Stop S	ign .					
Rights:	Include		ude		ude	Incl						
	0 1 0 1											
Volume Module: Base Vol:	10 1585 39	5 35 1265	5 5	15 80	85	470 60	35					
	0 1.00 1.0				1.00	1.00 1.00	1.00					
	0 1.00 1.0 10 1585 39				85	470 60	35					
	0 1.00 1.0				1.00	1.00 1.00	1.00					
•	5 0.95 0.9				0.95	0.95 0.95	0.95					
-	2 1668 41	.6 37 1332	5	16 84	89	495 63	37					
Reduct Vol:	0 0	0 0 0	) 0	0 0	0	0 0	0					
FinalVolume: 4	2 1668 41	6 37 1332	5	16 84	89	495 63	37					
Critical Gap Mod												
-	1 xxxx xxxx				6.2	7.1 6.5	6.2					
FollowUpTim: 2.	2 xxxx xxxx					3.5 4.0	3.3					
Capacity Module:		-										
Cnflict Vol: 133		x 2084 xxxx	. *****	3418 3576	1334	3247 3163	1668					
	6 xxxx xxxx				188	6 11	119					
	6 xxxx xxx				188	0 8	119					
Volume/Cap: 0.0	8 xxxx xxx	x 0.14 xxxx	xxxx	xxxx19.10	0.48	xxxx 7.58	0.31					
		-										
Level Of Service												
4 ~	3 xxxx xxxx											
Control Del: 12.			* ***	* * *	*xxxx	* *	xxxxx *					
LOS by Move: E	•	•										
Movement: LT Shared Cap.: xxx	P - LTR - RT				- KI	LT - LTR xxxx 0	- KT					
SharedOueue:xxxx												
Shrd ConDel:xxxx												
Shared LOS: *				* *		* *	*					
ApproachDel:	xxxxxx	xxxxx		xxxxx		xxxxx						
ApproachLOS: * * F F												
****************************												
Note: Queue reported is the number of cars per lane. ************************************												

		vel Of Ser		_		_					
******	2000 HCM Uns	ignalized	Metho	l (Base	. Volu	ne Alt	ernati	lve)			
				*****	****	****	*****		****		
Intersection	*****	******	****								
Average Dela	y (sec/veh): ******	OVERFLOW ******	****	Worst	Case 1	Level	Of Ser	vice:	F[xxx	<xx]< td=""></xx]<>	
Approach:	North Bou	nd So	outh B	ound	Eá	ast Bo	ound	We	st Bo	ound	
Movement:	L - T -			- R		- Т			T		
	<b></b>										
Control:	Uncontrol				St						
Rights:	Includ		Inclu 0 1!		ο ,	Inclu	1ae 0 0		Inclu 1!		
Lanes:	0 0 1!0	0 0	0 1;	0 0							
Volume Modul	•							1			
Base Vol:	110 1755	25 150	1405	325	295	150	50	25	160	75	
Growth Adi:			1.00	1.00		1.00	1.00	1,00		1.00	
Initial Bse:			1405	325	295	150	50	25	160	75	
User Adj:	1.00 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.95 0.95	0.95 0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
PHF Volume:	116 1847	26 158	1479	342	311	158	53	26	168	79	
Reduct Vol:	0 0	0 (	0	0	0	0	0	0	0	0	
FinalVolume:			1479	342	311	158	53	26	168	79	
						<del>-</del> -					
Critical Gap											
Critical Gp:				xxxxx	7.1		6.2	7.1		6.2	
FollowUpTim:				xxxxx	3.5	4.0	3.3	3.5	4.0	3.3	
Constitut Made	•										
Capacity Mod Cnflict Vol:			Lvvvv	xxxxx	/192	4071	1650	4163	4229	1861	
Potent Cap.:				XXXXX	1	3	122	1	2	91	
Move Cap.:				XXXXX	ō	1	122	0	1	91	
Volume/Cap:				xxxx	-	xxxx		xxxx	xxxx	0.87	
Level Of Ser	1				•					•	
2Way95thQ:	1.5 xxxx x	xxxx 2.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	21.8 xxxx x	xxxx 27.6	xxxx					XXXXX			
LOS by Move:		* D	*	*	*	*	*	*	*	*	
Movement:	LT - LTR -			- RT		- LTR			LTR		
Shared Cap.:				xxxxx			xxxxx	xxxx	-	xxxxx	
SharedQueue:											
Shrd ConDel:	* * *	* * *		xxxxx *	****	xxxx *		xxxxx *	**	XXXXX *	
Shared LOS:						xxxxx			xxxx	^	
ApproachDel: ApproachLOS:	*****	2	XXXXXX *		х.	XXXXX F		**	F		
*********	Approachus:										
Note: Queue reported is the number of cars per lane. ************************************											

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #7 Pengtn / Township \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.756 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: 16.9 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Pennington Street Name: Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 45 365 65 35 235 35 60 45 20 45 75 35 Initial Bse: 45 365 65 35 235 35 60 45 20 45 75 35 PHF Volume: 47 384 68 37 247 37 63 47 21 47 79 37 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 47 384 68 37 247 37 63 47 21 47 79 37

Vol/Sat: 0.76 0.76 0.76 0.52 0.52 0.52 0.27 0.27 0.27 0.32 0.32 0.32 Crit Moves: \*\*\*\* \*\*\* \* \* \* \* \*\*\*\* Delay/Veh: 22.0 22.0 22.0 14.0 14.0 14.0 11.4 11.4 11.4 11.7 11.7 11.7 AdjDel/Veh: 22.0 22.0 22.0 14.0 14.0 14.0 11.4 11.4 11.4 11.7 11.7 11.7 LOS by Move: C C C B B B B B B В ApproachDel: 22.0 14.0 11.7 11.4 Delay Adj: 1.00 1.00 1.00 1.00 ApprAdjDel: 22.0 14.0 11.4 11.7 LOS by Appr: C B B B B AllWayAvgQ: 2.5 2.5 2.5 0.9 0.9 0.9 0.3 0.3 0.3 0.4 0.4 \*\*\*\*\*\*\*\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

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NO IMPROVEMENTS 1690-10 LIVE OAK GPU

\_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #8 Pennington Rd / Luther Rd Average Delay (sec/veh): 6.2 Worst Case Level Of Service: B[ 14.1] \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Stop Sign Stop Sign Uncontrolled Uncontrolled Include Include 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Volume Module: Base Vol: 10 40 10 55 45 65 60 50 10 20 130 110 1.00 0 FinalVolume: 11 42 11 58 47 68 63 53 11 21 137 116 Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----| Capacity Module: 58 447 426 Cnflict Vol: 479 479 195 253 xxxx xxxxx 63 xxxx xxxxx Potent Cap.: 500 489 1014 521 520 847 1295 xxxx xxxxx 1521 xxxx xxxxx Move Cap.: 405 458 1014 457 487 847 1295 xxxx xxxxx 1521 xxxx xxxxx Volume/Cap: 0.03 0.09 0.01 0.13 0.10 0.08 0.05 xxxx xxxx 0.01 xxxx xxxx -----| Level Of Service Module: 0.2 xxxx xxxxx 0.0 xxxx xxxxx 2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxx Control Del:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 7.9 xxxx xxxxx 7.4 xxxx xxxxx LOS by Move: \* \* \* \* \* \* A \* \* A \* \* Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT14.1 ApproachDel: 13.4
ApproachLOS: B XXXXXX XXXXXX В \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

			<b></b>	<b></b> -			<b></b>		<del>-</del> -	. <b></b>	
		I	Level (	of Serv	zice (	Computa	ation I	Report	_		
2	2000 F	ICM Ur	ısignal	ized N	4ethoo	(Base	e Volum	ne Alt	ernati	.ve)	
******	* * * * * *	*****	*****	****	****	*****	*****	****	*****	*******	*****
Intersection	#9 Pe	enning	gton Ro	l / Rio	chard	Ave	****	****	*****	******	*****
Average Delay				6.1	****					vice: B[ ]	
Street Name:			Rich							ngton	
Approach:	Nor	rth Bo			uth Bo	und	Ea	ast Bo		West F	Round
Movement:	L -		- R		- Т			- T		L - T	
	 	<del>-</del>									
Control:	•	op Si			op Si			contro		Unconti	
Rights:		Inclu	_		Incl	-		Incl		Incl	
Lanes:	0 0	11101		0 (	0 0		0 (	0		0 1 0	0 0
								<b>-</b> -			
Volume Module	1		,	1			,		'		'
Base Vol:	60	0	135	0	0	0	0	55	55	175 145	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
Initial Bse:	60	0	135	0	0	0	0	55	55	175 145	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1.00 1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95 0.95	0.95
PHF Volume:	63	0	142	0	0	0	0	58	58	184 153	3 0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 (	0
FinalVolume:	63	0	142	0	0	0	0	58	58	184 153	0
									<b></b>		1
Critical Gap	Modu]	le:									
Critical Gp:	6.4	6.5				xxxxx				4.1 xxxx	
FollowUpTim:	3.5	4.0				XXXXX				2.2 xxx	
						<b>-</b>					
Capacity Mod										116	
Cnflict Vol:	608	608	87	*		xxxxx			xxxxx	116 xxxx	
Potent Cap.:	459	410	972			xxxxx			xxxxx	1454 xxxx	
Move Cap.:	409	352	972			XXXXX			xxxxx	0.13 xxx	
Volume/Cap:		0.00	0.15			XXXX		xxxx	xxxx	0.13 XXX	
Level Of Ser			zxxxx	vvvv	vvvv	xxxxx	vvvv	vvvv	xxxxx	0.4 xxx	e xxxxx
2Way95thQ: Control Del::										7,8 xxx	
LOS by Move:	*	*	*	*	*	*	*	*	*	A *	*
Movement:		- T.TP	- RT	r.m	- LTR	- RT	LT	- LTR	- RT	LT - LTI	R - RT
Shared Cap.:			xxxxx			xxxxx			xxxxx	xxxx xxx	
SharedQueue:			XXXXX							0,4 xxx	
Shrd ConDel:										7.8 xxx	
Shared LOS:	*	В	*	*	*	*	*	*	*	A *	*
ApproachDel:		12.5		x:	xxxxx		x	xxxxx		xxxxx	<
ApproachLOS:		В			*			*		*	
*******	****	****	****	* * * * *	****	****	*****	* * * *	* * * * * * :	*****	*****
Note: Queue:	**************************************										

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #10 Pength Rd / N Street Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: N Street Pennington Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - F L - T - R -----|----|-----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Volume Module: 35 290 165 Base Vol: 50 180 265 130 170 45 45 195 125 -----| Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx Capacity Module: Cnflict Vol: 1282 1234 224 1403 1187 239 305 xxxx xxxxx 242 xxxx xxxxx Potent Cap.: 142 177 816 117 188 799 1256 xxxx xxxxx 1324 xxxx xxxxx Move Cap.: 0 123 816 0 131 799 1256 xxxx xxxxx 1324 xxxx xxxxx Volume/Cap: xxxx 1.55 0.34 xxxx 1.37 0.06 0.04 xxxx xxxx 0.23 xxxx xxxx Level Of Service Module: LOS by Move: \* \* \* \* \* A \* \* A \* \* LT - LTR - RT Movement: 
 Shared LOS:
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Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #11 Pength Rd / Broadway \*\*\*\*\*\*\*\*\*\*\*\* Worst Case Level Of Service: F[ 93.7] Average Delay (sec/veh): 11.2 \*\*\*\*\* Pennington Street Name: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| -----| Volume Module: Base Vol: 75 0 115 0 0 0 470 120 85 800 0 \_\_\_\_\_|\_\_\_|\_\_\_| Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx Capacity Module: -----|----|------||-------||------| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* A \* \* Movement: LT - LTR - RT ApproachDel: 93.7 ApproachLOS: F Note: Queue reported is the number of cars per lane.

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#### 2030 GPU NO IMPROVEMENTS 1690-10 LIVE OAK GPU

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			Level (			_		•				
*****			Operati									
						*****						
Intersection ******						* * * * * * *	*****	****	*****	****	****	*****
Cycle (sec):			75			Critic	cal Vol	L./Car	o.(X):		1.4	130
Loss Time (se	ec):		12 (Y+F	R=4.0 s	sec)	Averag	ge Dela	ay (se	ec/veh)	:	201	7.2
Optimal Cycle	9:	1	80			Level	Of Ser	rvice:	ŀ			F
*****	****	****	*****	****	****	* * * * * *	*****	****	*****	****	****	*****
Approach:	Noi	cth B	ound	Sou	ith Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	ь -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control: Protected Protected Protected Protected												ted
Rights:	and the second s											ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 (	) 1	0 1	1 (	) 1	0 1	1 (	0 0	1 0	1 (	0 (	1 0
			<b>-</b>		<del>-</del>			<b></b>				
Volume Module	⊋:		,	•		,						
Base Vol:	210	1470	40	35	1300	180	310	120	195	135	175	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1470	40	35	1300	180	310	120	195	135	175	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	221	1547	42	37	1368	189	326	126	205	142	184	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	1547	42	37	1368	189	326	126	205	142	184	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	1547	42	37	1368	189	326	126	205	142	184	53
<b></b>		<b>-</b>			<b>-</b>	<del>-</del>		<del></del>				
Saturation Fl	Low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900
Adjustment:	0.90	0.95	0.81	0.90	0.95	0.81		0.89	0.89		0.95	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.38	0.62	1.00	0.78	0.22
Final Sat.:	1718	1809	1537	1718	1809	1537	1769	643	1045		1400	400
				:								
Capacity Anal	lysis	Modu	le:									
Vol/Sat:	0.13	0.86	0.03	0.02	0.76	0.12		0.20	0.20	0.08	0.13	0.13
Crit Moves:	* * * *				* * * *		* * * *				****	
Green/Cycle:	0.09	0.60	0.60		0.53	0.53		0.16	0.16		0.09	0.09
Volume/Cap:	1.43	1.42	0.05	1.42	1.43	0.23		1.25	1.25		1.43	1.43
Delay/Veh: 2		208		360.7	217		249.6		172.2		259	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh: 2		208		360.7	217		249.6		172.2			258.7
LOS by Move:		F	Α	F	F	A	F	F	F	F	F	F
HCM2kAvgQ:	15	92	0	4	83	2	22	19	19	9	16	16
********									****	*****	* * * * *	* * * * * * *
Note: Queue reported is the number of cars per lane. ************************************												

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #13 Pengtn Rd / Larkin Road \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 539.2 Worst Case Level Of Service: F[1173.3] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \_\_\_\_\_ Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 \_\_\_\_\_| Volume Module: Base Vol: 40 280 50 185 185 250 105 115 20 30 140 90 Initial Bse: 40 280 50 185 185 250 105 115 20 30 140 90 PHF Volume: 42 295 53 195 195 263 111 121 21 32 147 95 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 42 295 53 195 195 263 111 121 21 32 147 Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----|----|-----|------||-------| Capacity Module: Cnflict Vol: 839 658 132 784 621 195 242 xxxx xxxxx 142 xxxx xxxxx Potent Cap.: 285 384 918 311 403 847 1324 xxxx xxxxx 1441 xxxx xxxxx Move Cap.: 104 342 918 74 359 847 1324 xxxx xxxxx 1441 xxxx xxxxx Volume/Cap: 0.41 0.86 0.06 2.64 0.54 0.31 0.08 xxxx xxxx 0.02 xxxx xxxx \_\_\_\_\_| Level Of Service Module: A \* \* LOS by Move: \* \* \* \* \* A \* \* LT - LTR - RT Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: \* F \* \* F \* \* \* \* \* \* \* \* \* \* \* \* \* ApproachDel: 202.4 1173.3 xxxxxx xxxxxx F 202.4
ApproachLOS: F Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #14 Pengtn Rd / Orchard Rd \*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 7.7 Worst Case Level Of Service: C[ 18.9] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Pennington Street Name: North Bound South Bound East Bound L - T - R L - T - R East Bound West Bound Approach: L - T - R Movement: \_\_\_\_\_| Volume Module: 0 120 170 0 115 160 Base Vol: 0 0 0 130 0 175 PHF Volume: 0 0 0 137 0 184 126 179 0 0 121 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 0 0 137 0 184 126 179 0 0 121 168 Λ \_\_\_\_\_|\_\_\_|\_\_\_| Critical Gap Module: Critical Gp: 7.1 6.5 6.2 6.4 6.5 6.2 4.1 xxxx xxxxx xxxxx xxxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx xxxxx xxxx xxxxx \_\_\_\_\_| Capacity Module: Cnflict Vol: 729 721 179 637 637 205 289 xxxx xxxxx xxxx xxxx xxxxx Potent Cap.: 338 353 864 441 395 835 1272 xxxx xxxxx xxxx xxxx xxxxx Move Cap.: 242 316 864 405 353 835 1272 xxxx xxxxx xxxx xxxx xxxx xxxx Volume/Cap: 0.00 0.00 0.00 0.34 0.00 0.22 0.10 xxxx xxxx xxxx xxxx xxxx -----|-----||-------| Level Of Service Module: A \* \* \* \* \* LOS by Move: \* \* \* \* \* \* LT - LTR - RT Movement: SharedQueue:xxxxx xxxxx xxxxx xxxxx 3.4 xxxxx 0.3 xxxx xxxxx xxxxx xxxxx xxxxx Shrd ConDel:xxxxx xxxx xxxxx xxxxx 18.9 xxxxx 8.1 xxxx xxxxx xxxxx xxxxx xxxxx Shared LOS: \* \* \* \* C \* A \* \* \* \* \* \* \* ApproachDel: xxxxxx 18.9 xxxxxx xxxxxx xxxxxx ApproachDel: xxxxxx ApproachLOS: \* C Note: Queue reported is the number of cars per lane.

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# 2030 GPU NO IMPROVEMENTS

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #15 Pength Rd / Sinnard Ave Average Delay (sec/veh): 8.0 Worst Case Level Of Service: C[ 20.0] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Pennington Street Name: North Bound South Bound East Bound L - T - R L - T - R Approach: East Bound West Bound L - T - R -----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: 60 115 5 100 105 35 5 15 35 105 95 15 Base Vol: Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx \_\_\_\_\_| Capacity Module: Cnflict Vol: 521 455 124 468 508 113 121 xxxx xxxxx 184 xxxx xxxxx Potent Cap.: 466 501 927 505 468 940 1466 xxxx xxxxx 1391 xxxx xxxxx Move Cap.: 362 463 927 445 432 940 1466 xxxx xxxxx 1391 xxxx xxxxx Volume/Cap: 0.30 0.08 0.01 0.04 0.09 0.12 0.07 xxxx xxxx 0.00 xxxx xxxx -----| Level Of Service Module: 2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.0 xxxx xxxxx A \* \* LOS by Move: \* \* \* \* \* \* A \* \* LT - LTR - RT LT - LTR - RTLT - LTR - RT LT - LTR - RT Movement: Shared LOS: \* C \* \* B \* \* \* \* \* \* \* ApproachDel: 20.0 11.9 xxxxxx xxxxxx ApproachDel: 20.0 ApproachLOS: C xxxxx \* В \*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #17 Elm Street / N Street \*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.565 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: 11.8 Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R 
 Control:
 Stop Sign
 Rights:
 Include
 Include< \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 5 365 40 5 270 15 5 5 5 45 25 FinalVolume: 5 384 42 5 284 16 5 5 5 47 26 53 \_\_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| Saturation Flow Module: Lanes: 0.01 0.89 0.10 0.02 0.93 0.05 0.34 0.33 0.33 0.37 0.21 0.42 Final Sat.: 9 681 75 13 682 38 184 184 184 227 126 252 Capacity Analysis Module: Vol/Sat: 0.56 0.56 0.56 0.42 0.42 0.42 0.03 0.03 0.03 0.21 0.21 0.21 \*\*\*\* \*\*\* \* \* \* \* Crit Moves: ApproachDel: 13.2
Delay Adj: 1.00
ApprAdjDel: 13.2
LOS by Appr: B 8.8 9.7 11.0 1.00 1.00 1,00 8.8 11.0 9.7 В Α AllWayAvgQ: 1.2 1.2 1.2 0.7 0.7 0.7 0.0 0.0 0.0 0.2 0.2 Note: Oueue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\* \_\_\_\_\_ 2030 GPU NO IMPROVEMENTS

1690-10 LIVE OAK GPU

Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #18 SR 99 / Elm Street Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R-----|----|-----||------| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 0 1 0 1 0 0 0 1 0 0 0 1! 0 0 0 1! 0 0 \_\_\_\_\_| Volume Module: Base Vol: 180 1550 190 15 1615 5 5 15 140 180 15 15 Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 \_\_\_\_\_| Capacity Module: Cnflict Vol: 1705 xxxx xxxxx 1832 xxxx xxxxx 3861 3945 1703 3926 3847 1732 Potent Cap.: 365 xxxx xxxxx 326 xxxx xxxxx 2 3 113 2 4 109 0 1 113 0 2 109 Move Cap.: 365 xxxx xxxxx 326 xxxx xxxxx Volume/Cap: 0.52 xxxx xxxx 0.05 xxxx xxxx xxxx10.95 1.30 xxxx 9.40 0.14 -----| Level Of Service Module: C \* \* \* \* \* \* \* \* LOS by Move: D \* \* LT - LTR - RT LT - LTR - RT LT - LTR - RT Movement: LT - LTR - RT Shared LOS: \* \* \* \* \* \* \* \* \* \* \* xxxxxx xxxxxx xxxxxx XXXXXX ApproachDel: ApproachLOS: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #19 SR 99 / Archer Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 488.0 Worst Case Level Of Service: F[21930.5] \*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L - T - R Movement: \_\_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_| \_\_\_| \_\_\_| \_\_\_| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include Lanes: 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 1! 0 0 \_\_\_\_\_| Volume Module: Base Vol: 0 1905 200 10 2060 0 0 0 80 0 15 Initial Bse: 0 1905 200 10 2060 0 0 0 80 0 15 PHF Volume: 0 2005 211 11 2168 0 0 0 0 84 0 16 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 2005 211 11 2168 0 0 0 0 84 0 16 Critical Gap Module: 6.4 6.5 6.2 -----| Capacity Module: Level Of Service Module: LOS by Move: \* \* \* C \* \* \* \* \* \* \* \* LT - LTR - RT LT - LTR - RT LT - LTR - RT Movement: LT - LTR - RT xxxxxx ApproachDel: ApproachLOS: Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*

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			evel C							****		
	2000 HCM Unsignalized Method (Base Volume Alternative)											
						^^^^						
Intersection #20 SR 99 / Coleman Rd												
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]												
*****	*****	* * * * * *	*****	*****	****	****	*****	****	*****	* * * * * *	****	*****
_		rth Bo			ith Bo			st Bo			st Bo	_
Approach: Movement:	L ·								- R			
MOVEMENT:	I		- K	I			1	. <del></del>		1		
Control:	[In	aontro	olled	l Und	ontro	olled	l St	on Si	αn	St	op Si	.an
Rights:	OII	Inclu		OH	Inclu				ide		Inclu	
3	0			1 (			n c		0 0	0 0	111010	
Lanes:		U U		1	, <u> </u>	1	1	, <u> </u>	l	<b>-</b>		
Volume Module	-			1		I	ı		ŀ	I		1
Base Vol:		2005	120	565	1615	0	0	0	0	40	0	245
Growth Adi:		1.00	1.00	1.00		1.00	1.00		1.00	1.00	-	1.00
Initial Bse:		2005	120		1615	0	0	0	0	40	0	245
User Adi:		1.00	1.00	1.00		1.00	1.00	•	1.00	1.00	1.00	1.00
		0.95	0.95	0.95		0.95	0.95		0.95	0.95		0.95
PHF Adj:		2111	126		1700	0.55	0.55	0.55	0.73	42	0.53	258
PHF Volume:	-		120	293	1,00	0	0	0	0	0	0	0
Reduct Vol:	0	•	126		1700	0	0	0	0	42	0	258
FinalVolume:	_	2111				-			• .			
~				1 1	******	```	1616363636	vvvv	xxxxx	6.4	6.5	6.2
Critical Gp:									XXXXX	3.5		3.3
FollowUpTim:	XXXXX	xxxx	XXXXX								4.0	1
	,		- <b></b>							1		
Capacity Mod				0007						5063	5063	2174
Cnflict Vol:						XXXXX			xxxxx	1	1	59
Potent Cap.:						xxxxx			xxxxx	0	0	59
Move Cap.:						xxxxx			xxxxx	-	•	4.39
Volume/Cap:			xxxx		XXXX				xxxx		xxxx	
	•											
Level Of Ser				E 0 - E						******	3000000	3/3/3/3/3/
2Way95thQ:						XXXXX			xxxxx			
Control Del:							*			****	*	XXXXX
LOS by Move:			*	F	*							nm
			- RT			- RT			- RT		- LTR	
Shared Cap.:	xxxx	XXXX	XXXXX			xxxxx			xxxxx			XXXXX
SharedQueue:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	xxxxx	XXXX	XXXXX
Shrd ConDel:										****		XXXXX
Shared LOS:		*	*	*		*						*
ApproachDel:		xxxxx		X	XXXXX		X	xxxxx		X	xxxxx	
ApproachLOS:		*			*			*			F	E E E A 6 6 6 1
*****									****	*****	****	* * * * * *
Note: Queue	repor	ted is	s the r	number	of c	ars pe	r lane			n de de de e		
*****	* * * * *	****	*****	****	****	*****	*****	****	*****	****	****	

\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\* Intersection #21 SR 99 / Bishop Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 1138.7 Worst Case Level Of Service: F[27126.0] \*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \_\_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_| \_\_\_\_\_| \_\_\_\_\_| \_\_\_\_\_| \_\_\_\_\_| -----| Volume Module: Base Vol: 0 1840 205 130 1595 0 0 0 95 0 70 Initial Bse: 0 1840 205 130 1595 0 0 0 95 0 70 PHF Volume: 0 1937 216 137 1679 0 0 0 100 0 74 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1937 216 137 1679 0 0 0 0 100 0 74 \_\_\_\_\_| Critical Gap Module: Capacity Module: Cnflict Vol: xxxx xxxx xxxxx 2153 xxxx xxxxx xxxx xxxx xxxx 3997 3997 2045 Volume/Cap: xxxx xxxx xxxx 0.56 xxxx xxxx xxxx xxxx xxxx 55.12 0.00 1.05 \_\_\_\_\_|\_\_\_|\_\_\_| Level Of Service Module: xxxxxx \* xxxxxx ApproachDel: XXXXXX XXXXXX ApproachLOS: \*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \* \_\_\_\_\_ 2030 GPU NO IMPROVEMENTS

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #22 township Rd / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 4.1 Worst Case Level Of Service: C[ 18.8] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R\_\_\_\_\_| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 1! 0 0 0 0 1! 0 0 \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 0 350 105 65 205 0 0 0 95 0 70 Initial Bse: 0 350 105 65 205 0 0 0 95 0 70 PHF Volume: 0 368 111 68 216 0 0 0 0 100 0 74 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 368 111 68 216 0 0 0 0 100 0 74 -----| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 -----| Capacity Module: Cnflict Vol: xxxx xxxx xxxxx 479 xxxx xxxxx 813 832 216 776 776 Potent Cap.: xxxx xxxx xxxxx 1068 xxxx xxxxx 297 305 824 369 331 Move Cap.: xxxx xxxx xxxxx 1068 xxxx xxxxx 249 285 824 350 309 635 -----|----|-----||------| Level Of Service Module: Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx 432 xxxxx Shared Cap.: AAAA AAAA SAAAA S A \* \* \* \* \* C xxxxxx ApproachDel: xxxxxx ApproachLOS: \* xxxxxx 18.8 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #23 Larkin Road / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.697 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_| Volume Module: 175 Base Vol: 75 225 30 70 195 80 80 45 65 155 40 FinalVolume: 79 237 32 74 205 47 68 163 42 84 84 184 \_\_\_\_\_| | -----| Saturation Flow Module: Lanes: 0.23 0.68 0.09 0.23 0.63 0.14 0.25 0.60 0.15 0.24 0.24 0.52 Final Sat.: 113 340 45 111 310 72 117 279 72 122 122 267 Capacity Analysis Module: Vol/Sat: 0.70 0.70 0.70 0.66 0.66 0.66 0.59 0.59 0.59 0.69 0.69 0.69 Crit Moves: \*\*\*\* \* \* \* \* \*\*\*\* LOS by Move: C C C C C ССС C C C ApproachDel: 17.6 20.7 21.7 20.1 1.00 1.00 1.00 Delay Adj: 1.00 20.1 17.6 20.7 21.7 ApprAdjDel: С C C LOS by Appr: AllwayAvgQ: 1.7 1.7 1.7 1.4 1.4 1.4 1.0 1.0 1.0 1.6 1.6 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #24 SR 99 / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx] \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 0 1 0 1 0 1 0 1 0 0 1! 0 0 0 0 1! 0 0 Volume Module: Base Vol: 613 2035 100 10 1550 5 10 45 245 120 75 95 Initial Bse: 613 2035 100 10 1550 5 10 45 245 120 75 95 PHF Volume: 645 2142 105 11 1632 5 11 47 258 126 79 100 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 645 2142 105 11 1632 5 11 47 258 126 79 100 -----| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 \_\_\_\_\_| Capacity Module: Cnflict Vol: 1637 xxxx xxxxx 2247 xxxx xxxxx 5227 5191 1632 5293 5143 2195 Potent Cap.: 388 xxxx xxxxx 224 xxxx xxxxx 0 0 125 0 0 57 Move Cap.: 388 xxxx xxxxx 224 xxxx xxxxx 0 0 125 0 0 57 Volume/Cap: 1.66 xxxx xxxx 0.05 xxxx xxxx xxxx xxxx 2.06 xxxx xxxx 1.75 Level Of Service Module: LOS by Move: F \* \* C \* \* \* \* \* \* \* \* LT - LTR - RT LT - LTR - RT Movement: LT - LTR - RT LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx 0 xxxxx xxxxxx xxxxxx xxxxxx ApproachDel: xxxxxx F ApproachLOS: \*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Oueue reported is the number of cars per lane.

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #25 SR 99 / APRICOT \*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 44440.6 Worst Case Level Of Service: F[374310.6] \*\*\*\*\*\*\*\*\*\*\*\* Street Name: SR 99 APRICOT West Bound L - T - R -----| \_\_\_\_\_ Volume Module: Base Vol: 195 1780 0 0 1785 360 360 0 195 Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx xxxxx xxxx xxxx xxxx 6.4 6.5 6.2 xxxxx xxxx xxxx FollowUpTim: 2.2 xxxx xxxxx xxxxx xxxx xxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxx xxxx xxx xxxx xxxx xxxx xxxx xxxx xxx xxxx xxxx xxxx xxxx xxxx xxx xxx xxx xxx xxx xxx xxxx xxxxCapacity Module: Cnflict Vol: 2258 xxxx xxxxx xxxx xxxx xxxx 4163 4163 1879 xxxx xxxx xxxxx Volume/Cap: 0.93 xxxx xxxx xxxx xxxx xxxx 0.00 2.31 xxxx xxxx xxxx Level Of Service Module: LT - LTR - RT LT - LTR - RT LT - LTR - RTLT - LTR - RT Movement: SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 75.8 xxxxx xxxxx xxxx xxxxx ApproachDel: xxxxxx
ApproachLOS: \* F \*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

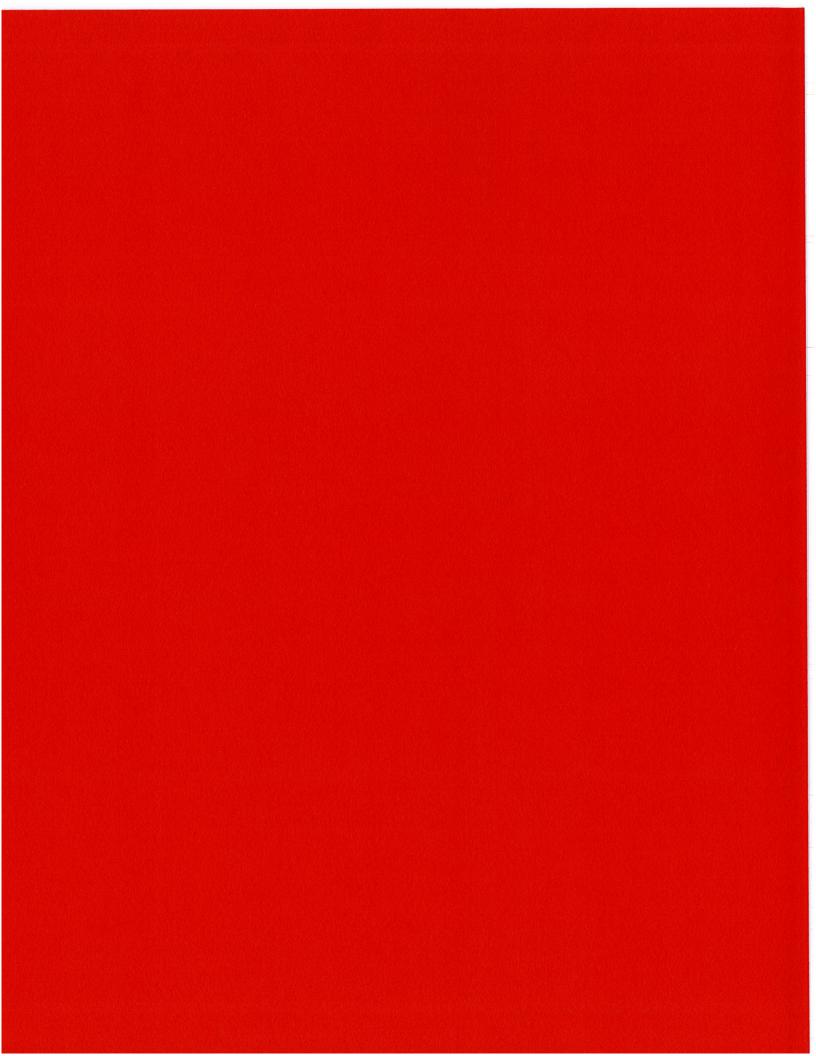
1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #26 SR 99 / ASH ST \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 762.1 Worst Case Level Of Service: F(25667.3) Street Name: SR 99 ASH ST Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 1 0 1 1 0 1 0 0 0 0 0 0 0 0 1! 0 0 -----|----|-----||------| Volume Module: 0 1970 115 10 1990 0 0 115 0 Base Vol: Initial Bse: 0 1970 115 10 1990 0 0 0 115 0 10 PHF Volume: 0 2074 121 11 2095 0 0 0 0 121 0 11 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 2074 121 11 2095 0 0 0 0 121 0 11 Critical Gap Module: Capacity Module: 

 Cnflict Vol: xxxx xxxx xxxxx
 2195 xxxx xxxxx
 xxxx xxxx xxxx
 4189 4189
 2074

 Potent Cap.: xxxx xxxx xxxxx
 234 xxxx xxxxx
 xxxx xxxx xxxxx
 2
 2
 68

 Move Cap.: xxxx xxxx xxxxx
 234 xxxx xxxxx
 xxxx xxxx xxxxx
 2
 2
 68

 -----||------||-------| Level Of Service Module: Movement: LT - LTR - RT ApproachDel: xxxxxx
ApproachLOS: \* Note: Queue reported is the number of cars per lane.



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2030 GPU mitigated 1690-10 LIVE OAK GPU

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Scenario Report

Scenario: GPU KOLA AM

Command: Default Command
Volume: GPU KOLA AM
Geometry: existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

#### 2030 GPU mitigated 1690-10 LIVE OAK GPU

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Intersection Volume Report
Base Volume Alternative

Southbound Northbound Eastbound Westbound L -- T -- R L -- T -- R L -- T -- R Node Intersection 1 Township Rd / 0 155 2 SR 99 / Rivei 145 695 0 65 70 85 195 0 0 0 0 105 20 835 75 10 15 70 10 30 35 20 30 345 35 470 15 30 50 10 10 45 3 Larkin Road / 20 25 95 1140 250 5 5 115 260 5 1400 5 5 5 SR 99 / Ramsd 35 1110 20 95 1430 190 185 135 35 20 135 95 6 SR 99 / Kola 7 Pengtn / Town 20 205 40 70 265 30 65 50 60 20 20 35 8 Pennington Rd 10 40 20 110 40 15 10 65 55 55 60 130 9 Pennington Rd 45 0 165 0 0 0 150 45 115 60 0 45 250 230 135 10 Pengtn Rd / N 25 110 255 90 140 35 15 395 11 Pengtn Rd / B 90 0 50 0 0 0 590 135 35 515 Λ 25 75 1305 130 170 305 215 85 360 3.0 12 SR 99 / Penni 260 1025 45 13 Pengtn Rd / L 25 145 75 190 135 120 125 280 35 225 95 0 0 0 95 0 220 110 320 0 0 345 70 14 Pengtn Rd / 0 
 350
 60
 5
 20
 60
 75
 65
 30
 150
 10
 100
 20

 5
 275
 5
 25
 340
 30
 5
 30
 5
 10
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 30

 100
 1240
 210
 25
 1590
 5
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 50
 175
 170
 20
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 1465
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 1945
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 1125
 10
 245
 1990
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 85
 0
 330

 0
 1075
 125
 30
 1970
 0
 0
 0
 0
 170
 0
 150

 0
 105
 95
 80
 320
 0
 0
 0
 0
 105
 0
 70
 15 Pengtn Rd / S 350 60 5 275 17 Elm Street / 100 1240 210 18 SR 99 / Elm S 0 1465 225 19 SR 99 / Arche 20 SR 99 / Colem 21 SR 99 / Bisho 22 township Rd / 65 105 40 200 160 15 40 180 115 55 115 140 23 Larkin Road / 15 10 1880 40 10 50 430 80 65 15 24 SR 99 / Paseo 325 1110 25 SR 99 / APRIC 210 1255 0 0 1630 350 340 0 210 0 0 26 SR 99 / ASH 0 1460 110 15 1850 0 0 0 110 0 15

#### Impact Analysis Report Level Of Service

Intersection	Base Del/ V/	Future Del/ V/	Change in
# 1 Township Rd / Riviera Rd	LOS Veh C B 13.5 0.000	LOS Veh C B 13.5 0.000	+ 0.000 D/V
# 2 SR 99 / Riveira Rd	в 15.1 0.518	в 15.1 0.518	+ 0.000 D/V
# 3 Larkin Road / Riviera Road	D 31.5 0.000	D 31.5 0.000	+ 0.000 D/V
# 5 SR 99 / Ramsdell Drive	C 27.2 0.867	C 27.2 0.867	+ 0.000 D/V
# 6 SR 99 / Kola Street	C 34.4 0.930	C 34.4 0.930	+ 0.000 D/V
# 7 Pengtn / Township	в 13.0 0.601	в 13.0 0.601	+ 0.000 V/C
# 8 Pennington Rd / Luther Rd	C 16.5 0.000	C 16.5 0.000	+ 0.000 D/V
# 9 Pennington Rd / Richard Ave	B 12.2 0.000	в 12.2 0.000	+ 0.000 D/V
# 10 Pengtn Rd / N Street	D 42.9 0.815	D 42.9 0.815	+ 0.000 D/V
# 11 Pengtn Rd / Broadway	F 68.4 0.000	F 68.4 0.000	+ 0.000 D/V
# 12 SR 99 / Pennington Rd	D 51.9 0.988	D 51.9 0.988	+ 0.000 D/V
# 13 Pengtn Rd / Larkin Road	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 14 Pengtn Rd / Orchard Rd	C 24.7 0.606	C 24.7 0.606	+ 0.000 D/V
# 15 Pengtn Rd / Sinnard Ave	C 15.7 0.728	C 15.7 0.728	+ 0.000 V/C
# 17 Elm Street / N Street	в 11.8 0.562	в 11.8 0.562	+ 0.000 V/C
# 18 SR 99 / Elm Street	D 42.6 0.984	D 42.6 0.984	+ 0.000 D/V
# 19 SR 99 / Archer Ave	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 20 SR 99 / Coleman Rd	в 14.1 0.788	в 14.1 0.788	+ 0.000 D/V
# 21 SR 99 / Bishop Ave	в 12.0 0.817	в 12.0 0.817	+ 0.000 D/V
# 22 township Rd / Paseo Rd	в 14.8 0.000	B 14.8 0.000	+ 0.000 D/V
# 23 Larkin Road / Paseo Rd	D 26.0 0.844	D 26.0 0.844	+ 0.000 V/C
# 24 SR 99 / Paseo Rd	E 67.5 1.108	E 67.5 1.108	+ 0.000 D/V
# 25 SR 99 / APRICOT	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V

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2030 GPU mitigated

1690-10 LIVE OAK GPU 

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #1 Township Rd / Riviera Rd \*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 4.4 Worst Case Level Of Service: B[ 13.5] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Riviera Street Name: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_ Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 1! 0 0 \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 0 155 70 85 195 0 0 0 0 65 0 105 Initial Bse: 0 155 70 85 195 0 0 0 65 0 105 PHF Volume: 0 172 78 94 217 0 0 0 0 72 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 172 78 94 217 0 0 0 0 72 0 117 -----| Critical Gap Module: Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxx 3.5 4.0 \_\_\_\_\_|\_\_\_|\_\_\_| Capacity Module: -----| Level Of Service Module: Shared LOS: \* \* \* \* \* \* \* \* B ApproachDel: xxxxxx
ApproachLOS: \* xxxxxx xxxxxx 13.5 \* \*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #2 SR 99 / Riveira Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.518 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 42 Level Of Service: 15.1 \_\_ \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_| Control: Protected Protected Protected Protected Protected Protected Include I Volume Module: 75 Base Vol: 145 695 35 20 835 10 15 70 10 30 2.0 FinalVolume: 161 772 39 22 928 83 11 17 78 11 33 22 Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.90 0.89 0.89 0.93 0.86 0.86 0.93 0.92 0.92 Lanes: 1.00 1.90 0.10 1.00 1.84 0.16 1.00 0.18 0.82 1.00 0.60 0.40 Final Sat.: 1718 3249 164 1718 3116 280 1769 288 1343 1769 1050 700 \_\_\_\_\_|\_\_\_|\_\_\_| Capacity Analysis Module: Vol/Sat: 0.09 0.24 0.24 0.01 0.30 0.30 0.01 0.06 0.06 0.01 0.03 0.03 \*\*\*\* Crit Moves: \*\*\*\* \* \* \* \* AdjDel/Veh: 38.5 5.3 5.3 49.7 13.1 13.1 53.0 44.5 44.5 69.6 42.5 42.5 LOS by Move: D A A D B B D D D E D D HCM2kAvgQ: 5 5 5 1 10 10 1 3 3 1 2 2 \*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #3 Larkin Road / Riviera Road \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 5.0 Worst Case Level Of Service: D[ 31.5] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - RL - T - R Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 0 1 0 1 0 0 1 0 \_\_\_\_\_| Volume Module: Base Vol: 30 345 20 35 470 15 30 50 10 10 45 Initial Bse: 30 345 20 35 470 15 30 50 10 10 45 25 PHF Volume: 33 383 22 39 522 17 33 56 11 11 50 28 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 33 383 22 39 522 17 33 56 11 11 50 28 -----|----|----|-----||-------||------| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 7.1 6.5 Capacity Module: Cnflict Vol: 539 xxxx xxxxx 406 xxxx xxxxx 1108 1081 531 1103 1078 Potent Cap.: 1019 xxxx xxxxx 1142 xxxx xxxxx 185 216 545 187 217 Move Cap.: 1019 xxxx xxxxx 1142 xxxx xxxxx 137 202 545 137 203 650 Volume/Cap: 0.03 xxxx xxxx 0.03 xxxx xxxx 0.24 0.28 0.02 0.08 0.25 0.04 -----| Level Of Service Module: 2Way95thQ: 0.1 xxxx xxxxx 0.1 xxxx xxxxx 0.9 xxxx xxxxx 0.3 xxxx xxxxx Control Del: 8.7 xxxx xxxxx 8.3 xxxx xxxxx 39.6 xxxx xxxxx 33.5 xxxx xxxxx LOS by Move: A \* \* A \* \* E \* \* D \* \*
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: \* \* \* \* \* \* \* \* D \* \* C \* 31.5 xxxxxx 25.0 ApproachDel: XXXXXX D C ApproachLOS: Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #5 SR 99 / Ramsdell Drive \* Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 96 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - F L - T - R 
 Control:
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Include
 Include< \_\_\_\_\_| Volume Module: Base Vol: 95 1140 250 5 1400 5 5 5 115 260 Initial Bse: 95 1140 250 5 1400 5 5 5 115 260 5 5 PHF Volume: 106 1267 278 6 1556 6 6 6 128 289 6 6 -----| Saturation Flow Module: Adjustment: 0.90 0.90 0.81 0.90 0.90 0.90 0.93 0.84 0.84 0.93 0.91 0.91 Lanes: 1.00 2.00 1.00 1.00 1.99 0.01 1.00 0.04 0.96 1.00 0.50 0.50 Final Sat.: 1718 3437 1537 1718 3421 12 1769 66 1527 1769 861 861 -----|----| Capacity Analysis Module: Vol/Sat: 0.06 0.37 0.18 0.00 0.45 0.45 0.00 0.08 0.08 0.16 0.01 0.01 \*\*\* Crit Moves: \*\*\*\* Green/Cycle: 0.07 0.59 0.59 0.01 0.52 0.52 0.09 0.10 0.10 0.19 0.19 0.19 C D F F 25 0 7 7 LOS by Move: F B B F C HCM2kAvgQ: 6 14 4 1 25 E C 12 Ω \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*

2030 GPU mitigated 1690-10 LIVE OAK GPU \_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #6 SR 99 / Kola Street \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.930 12 (Y+R=4.0 sec) Average Delay (sec/veh): Loss Time (sec): Optimal Cycle: 126 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - RL - T - R \_\_\_\_\_\_|\_\_\_|\_\_\_| 
 Control:
 Protected
 Protected
 Protected
 Protected

 Rights:
 Include
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 0 \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 35 1110 20 95 1430 190 185 135 35 20 135 Initial Bse: 35 1110 20 95 1430 190 185 135 35 20 135 95 PHF Volume: 39 1233 22 106 1589 211 206 150 39 22 150 106 Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.90 0.89 0.89 0.93 0.95 0.95 0.93 0.92 0.92 Lanes: 1.00 1.96 0.04 1.00 1.77 0.23 1.00 0.79 0.21 1.00 0.59 0.41 Final Sat.: 1718 3366 61 1718 2979 396 1769 1433 371 1769 1025 721 \_\_\_\_\_|\_\_\_| Capacity Analysis Module: Vol/Sat: 0.02 0.37 0.37 0.06 0.53 0.53 0.12 0.10 0.10 0.01 0.15 0.15 \* \* \* \* Crit Moves: \*\*\*\* Green/Cycle: 0.02 0.51 0.51 0.09 0.57 0.57 0.12 0.25 0.25 0.03 0.16 0.16 Volume/Cap: 0.93 0.72 0.72 0.72 0.93 0.93 0.93 0.42 0.42 0.42 0.93 0.93 F C C 10 5 5 LOS by Move: F C HCM2kAvgQ: 3 16 C 16 E C 5 31 С D E E 10 1 12 5 12 31 \*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) Intersection #7 Pengtn / Township \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.601 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Pennington Street Name: North Bound South Bound East Bound West Bound
L - T - R L - T - R L - T - F Approach: L - T - R Movement: -----| Volume Module: Base Vol: 20 205 40 70 265 30 65 50 60 20 20 35 FinalVolume: 22 228 44 78 294 33 72 56 67 22 22 39 -----| Saturation Flow Module: Lanes: 0.08 0.77 0.15 0.19 0.73 0.08 0.37 0.29 0.34 0.27 0.27 0.46 Final Sat.: 49 506 99 129 490 55 214 164 197 143 143 249 \_\_\_\_\_| Capacity Analysis Module: Vol/Sat: 0.45 0.45 0.45 0.60 0.60 0.60 0.34 0.34 0.34 0.16 0.16 0.16 Crit Moves: \*\*\*\* \*\*\*\* LOS by Move: B B B C C C B B в А Α ApproachDel: 12.2 15.2 11.3 9.8 ApprAdjDel: 12.2
LOS by Appr: P
AllWavAvcc 1.00 1.00 1.00 9.8 15.2 11.3 C В Α AllwayAvgQ: 0.7 0.7 0.7 1.3 1.3 1.3 0.4 0.4 0.4 0.1 0.1 Note: Oueue reported is the number of cars per lane.

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1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #8 Pennington Rd / Luther Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 7.9 Worst Case Level Of Service: C[ 16.5] \*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Movement: -----|----|-----|------| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 10 40 20 110 40 60 130 15 55 10 65 Initial Bse: 10 40 20 110 40 55 60 130 15 10 65 55 -----| Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx \_\_\_\_\_| Capacity Module: Cnflict Vol: 464 442 153 444 419 103 133 xxxx xxxxx 161 xxxx xxxxx Potent Cap.: 512 513 899 524 525 952 1433 xxxx xxxxx 1400 xxxx xxxxx Move Cap.: 427 484 899 455 496 952 1433 xxxx xxxxx 1400 xxxx xxxxx Volume/Cap: 0.03 0.09 0.02 0.27 0.09 0.06 0.05 xxxx xxxx 0.01 xxxx xxxx -----|----||------| Level Of Service Module: A \* \* LOS by Move: \* \* \* \* \* A \* \* Movement: LT - LTR - RT ApproachLOS: В C <u>---</u> Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #9 Pennington Rd / Richard Ave \*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 6.0 Worst Case Level Of Service: B[ 12.2] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Richard Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R Volume Module: Base Vol: 45 0 165 0 0 0 0 150 45 115 60 Initial Bse: 45 0 165 0 0 0 0 150 45 115 60 0 PHF Volume: 50 0 183 0 0 0 0 167 50 128 67 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 50 0 183 0 0 0 0 167 50 128 67 -----||-----||------| Critical Gap Module: Critical Gp: 6.4 6.5 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx FollowUpTim: Capacity Module: Cnflict Vol: 514 514 Potent Cap.: 521 464 Level Of Service Module: Movement: LT - LTR - RT Shared LOS: \* B \* \* \* \* \* \* \* \* A \* ApproachDel: 12.2 xxxxxx xxxxx ApproachDel: 12.2 ApproachLOS: B XXXXXX \*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #10 Pengtn Rd / N Street \* Cycle (sec): 100 Critical Vol./Cap.(X): 0.815 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 81 Level Of Service: \* Street Name: N Street Pennington North Bound South Bound East Bound West Bound L - T - R L - T - R Approach: North Bound Movement: 
 Control:
 Split Phase
 Split Phase
 Protected
 Protected

 Rights:
 Include
 Include
 Include
 Include

 Min. Green:
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0

 Lanes:
 0 0 1! 0 0 0 1! 0 0 1 0 1 1 0 1 1 0
 1 0 1 1 0 0 1 0 1 0
 Volume Module: Base Vol: 25 110 255 90 140 35 15 395 45 250 230 Initial Bse: 25 110 255 90 140 35 15 395 250 230 45 135 PHF Volume: 28 122 283 100 156 39 17 439 50 278 256 150 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 28 122 283 100 156 39 17 439 50 278 256 FinalVolume: 28 122 283 100 156 39 17 439 50 278 256 150 -----||-----||------| Saturation Flow Module: Capacity Analysis Module: Vol/Sat: 0.26 0.26 0.26 0.16 0.16 0.16 0.01 0.14 0.14 0.16 0.12 0.12 Crit Moves: \* \* \* \* \*\*\*\* Green/Cycle: 0.31 0.31 0.31 0.20 0.20 0.20 0.03 0.17 0.17 0.19 0.34 0.34 Delay/Veh: 41.0 41.0 41.0 51.5 51.5 51.5 52.5 48.3 48.3 52.7 25.1 25.1 AdjDel/Veh: 41.0 41.0 41.0 51.5 51.5 51.5 52.5 48.3 48.3 52.7 25.1 25.1 LOS by Move: D D D D D D D D D D C C HCM2kAvgQ: 15 15 15 11 11 11 1 10 10 11 5 5 Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #11 Pength Rd / Broadway \* Average Delay (sec/veh): 7.0 Worst Case Level Of Service: F[ 68.4] Street Name: Pennington North Bound South Bound East Bound West Bound L - T - R L - T - R Approach: -----| Control: Rights: Volume Module: Base Vol: 90 Ω 50 0 0 0 0 590 135 35 515 Initial Bse: 90 0 50 0 0 0 0 590 135 35 515 PHF Adj: PHF Volume: 100 0 56 0 0 0 0 656 150 39 572 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 100 0 56 0 0 0 0 656 150 39 572 0 0 -----| Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx 2.2 xxxx xxxxx Capacity Module: Cnflict Vol: 1381 1381 731 xxxx xxxx xxxxx xxxx xxxx xxxxx 806 xxxx xxxxx -----| Level Of Service Module: 0.1 xxxx xxxxx 9.6 xxxx xxxxx A \* \* LOS by Move: \* \* \* \* \* \* \* \* Movement: LT - LTR - RT 9.6 xxxx xxxxx A \* \* XXXXXX \* Note: Queue reported is the number of cars per lane, \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #12 SR 99 / Pennington Rd \* Cycle (sec): 100 Critical Vol./Cap.(X): 0.988 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 175 Level Of Service: Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Movement: -----| 
 Control:
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Include
 Include< -----| Volume Module: 75 1305 Base Vol: 260 1025 25 130 170 305 215 85 360 Initial Bse: 260 1025 25 75 1305 130 170 305 215 85 360 PHF Adj: PHF Volume: 289 1139 28 83 1450 144 189 339 239 94 400 33 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 n Reduced Vol: 289 1139 28 83 1450 144 189 339 239 94 400 33 FinalVolume: 289 1139 28 83 1450 144 189 339 239 94 400 33 Saturation Flow Module: -----| Capacity Analysis Module: Vol/Sat: 0.17 0.34 0.34 0.05 0.47 0.47 0.11 0.17 0.17 0.05 0.12 0.12 Crit Moves: \*\*\*\* \* \* \* \* Green/Cycle: 0.17 0.57 0.57 0.08 0.48 0.48 0.11 0.18 0.18 0.05 0.13 0.13 Delay/Veh: 90.6 14.8 14.8 51.7 45.4 45.4 106.0 71.2 71.2 129.8 83.3 83.3 AdjDel/Veh: 90.6 14.8 14.8 51.7 45.4 45.4 106.0 71.2 71.2 129.8 83.3 83.3 LOS by Move: F B B D D D F E E F F HCM2kAvgQ: 14 13 13 4 33 33 10 14 14 6 11 \* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #13 Pengtn Rd / Larkin Road Average Delay (sec/veh): 818.1 Worst Case Level Of Service: F[2563.6] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Volume Module: 190 135 Base Vol: 25 145 75 120 125 280 35 45 225 PHF Volume: 28 161 83 211 150 133 139 311 39 50 250 106 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 28 161 83 211 150 133 139 311 39 50 250 106 -----|-----||------||-------||-------| Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx Capacity Module: Cnflict Vol: 1153 1064 331 1133 1031 303 356 xxxx xxxxx 350 xxxx xxxxx Potent Cap.: 174 223 711 180 233 737 1203 xxxx xxxxx 1209 xxxx xxxxx Move Cap.: 47 187 711 38 195 737 1203 xxxx xxxxx 1209 xxxx xxxxx Volume/Cap: 0.59 0.86 0.12 5.51 0.77 0.18 0.12 xxxx xxxx xxxx 0.04 xxxx xxxx -----|-----| Level Of Service Module: A \* \* LOS by Move: \* \* \* \* \* A \* \* Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #14 Pengtn Rd / Orchard Rd \* Cycle (sec): 100 Critical Vol./Cap.(X): 0.606 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 49 Level Of Service: 24.7 \* Street Name: Pennington North Bound South Bound East Bound West Bound L - T - R L - T - R Approach: Movement: 
 Control:
 Split Phase
 Split Phase
 Protected
 Protected

 Rights:
 Include
 Include
 Include
 Include

 Min. Green:
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0

 Lanes:
 0
 0
 1!
 0
 0
 1
 0
 0
 1
 0
 0
 1
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 0
 0
 Volume Module: Base Vol: 0 0 0 95 0 220 110 320 0 0 345 Initial Bse: 0 0 0 95 0 110 320 0 0 345 220 70 PHF Volume: 0 0 0 106 0 244 122 356 0 0 383 78
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 106 0 244 122 356 0 0 383 78 FinalVolume: 0 0 0 106 0 244 122 356 0 0 383 78 Saturation Flow Module: Final Sat.: 0 1900 0 501 0 1161 1769 1862 0 1900 1509 Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.21 0.00 0.21 0.07 0.19 0.00 0.00 0.25 0.25 Crit Moves: \* \* \* \* \*\*\* Green/Cycle: 0.00 0.00 0.00 0.35 0.00 0.35 0.11 0.53 0.00 0.00 0.42 0.42 Volume/Cap: 0.00 0.00 0.00 0.61 0.00 0.61 0.61 0.36 0.00 0.00 0.61 0.61 Delay/Veh: 0.0 0.0 0.0 28.8 0.0 28.8 47.4 13.7 0.0 0.0 24.1 24.1 AdjDel/Veh: 0.0 0.0 0.0 28.8 0.0 28.8 47.4 13.7 0.0 0.0 24.1 24.1 LOS by Move: A A A C A C D B A A C C HCM2kAvgQ: 0 0 0 10 0 10 5 6 0 0 11 11 \*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #15 Pengtn Rd / Sinnard Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: 0 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R -----| -----||-----||-----||------| Volume Module: Base Vol: 350 60 5 20 60 75 65 30 150 10 100 Initial Bse: 350 60 5 20 60 75 65 30 150 10 100 20 PHF Volume: 389 67 6 22 67 83 72 33 167 11 111 Saturation Flow Module: Lanes: 0.85 0.14 0.01 0.13 0.39 0.48 0.27 0.12 0.61 0.08 0.77 0.15 Final Sat.: 534 92 8 76 227 283 158 73 365 41 408 82 -----| Capacity Analysis Module: Vol/Sat: 0.73 0.73 0.73 0.29 0.29 0.29 0.46 0.46 0.46 0.27 0.27 0.27 \* \* \* \* Crit Moves: \*\*\*\* \*\*\*\* Delay/Veh: 20.9 20.9 20.9 10.6 10.6 10.6 12.6 12.6 12.6 11.0 11.0 11.0 AdjDel/Veh: 20.9 20.9 20.9 10.6 10.6 10.6 12.6 12.6 12.6 11.0 11.0 11.0 LOS by Move: C C C B B B B B B B ApproachDel: 20.9 10.6 12.6 11.0 Delay Adi: 1.00 1.00 1.00 1.00 20.9 ApprAdjDel: 10.6 12.6 11 0 В LOS by Appr: С В В AllWayAvgQ: 2.2 2.2 2.2 0.3 0.3 0.3 0.7 0.7 0.7 0.3 0.3 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #17 Elm Street / N Street \* Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R -----| -----| Volume Module: 5 275 Base Vol: 5 25 340 30 5 30 5 10 15 Initial Bse: 5 275 5 25 340 30 5 30 5 10 15 PHF Volume: 6 306 6 28 378 33 6 33 6 11 17 33 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 6 306 6 28 378 33 6 33 6 11 17 0 33 FinalVolume: 6 306 6 28 378 33 6 33 6 11 17 33 Saturation Flow Module: Lanes: 0.02 0.96 0.02 0.06 0.86 0.08 0.12 0.75 0.13 0.18 0.27 0.55 Final Sat.: 13 723 13 49 672 59 71 425 71 108 163 325 Capacity Analysis Module: Vol/Sat: 0.42 0.42 0.42 0.56 0.56 0.56 0.08 0.08 0.08 0.10 0.10 0.10 Crit Moves: \*\*\*\* \* \* \* \* \*\*\*\* Delay/Veh: 10.9 10.9 10.9 13.0 13.0 13.0 9.0 9.0 9.0 8.9 8.9 8.9 AdjDel/Veh: 10.9 10.9 10.9 13.0 13.0 13.0 9.0 9.0 9.0 8.9 8.9 8.9 LOS by Move: B B B B B A A A A Α Α ApproachDel: 10.9 13.0 9.0 8.9 Delay Adj: 1.00 ApprAdjDel: 10.9 LOS by Appr: B 1.00 1.00 1.00 13.0 9.0 8.9 В Α AllWayAvgQ: 0.7 0.7 0.7 1.2 1.2 1.2 0.1 0.1 0.1 0.1 0.1 0.1 \* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #18 SR 99 / Elm Street \* Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 170 Level Of Service: \* Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-RControl: Protected Protected Split Phase Split Phase Rights: Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0 Volume Module: 25 1590 175 Base Vol: 100 1240 210 5 5 50 170 20 0.90 PHF Volume: 111 1378 233 28 1767 6 6 56 194 189 22
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 111 1378 233 28 1767 6 6 56 194 189 22 0 22 FinalVolume: 111 1378 233 28 1767 6 6 56 194 189 22 22 Saturation Flow Module: Lanes: 1.00 1.71 0.29 1.00 1.99 0.01 0.02 0.22 0.76 0.81 0.10 0.09 Final Sat.: 1718 2874 487 1718 3426 11 36 363 1270 1430 168 168 -----||----|---||-----||------||-----| Capacity Analysis Module: Vol/Sat: 0.06 0.48 0.48 0.02 0.52 0.52 0.15 0.15 0.15 0.13 0.13 0.13 Crit Moves: \*\*\*\* \* \* \* \* \* \* \* \* Green/Cycle: 0.07 0.57 0.57 0.02 0.52 0.52 0.16 0.16 0.16 0.13 0.13 0.13 Delay/Veh: 125.9 21.2 21.2 141.7 40.8 40.8 93.2 93.2 93.2 96.8 96.8 96.8 AdjDel/Veh: 125.9 21.2 21.2 141.7 40.8 40.8 93.2 93.2 93.2 96.8 96.8 96.8 LOS by Move: F C C F D D F F F F F HCM2kAvgQ: 7 24 24 2 35 35 12 12 12 12 12 \* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #19 SR 99 / Archer Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 163.3 Worst Case Level Of Service: F[8128.1] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Rights:
 Include
 Include
 Include
 Include

 Lanes:
 0 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1! 0 0
 0 0 1! 0 0
 Volume Module: Base Vol: 0 1465 225 25 1945 0 0 0 0 PHF Volume: 0 1628 250 28 2161 0 0 0 0 0 FinalVolume: 0 1628 250 28 2161 0 0 0 0 0 50 0 0 0 50 0 33 -----|-----|------| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxx xxxx 3.5 4.0 3.3 -----| Capacity Module: Level Of Service Module: Shared LOS: ApproachDel: xxxxxx xxxxx \* ApproachLOS: \* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #20 SR 99 / Coleman Rd \* Loss Time (sec):

9 (Y+R=4.0 sec)

Average Delay (sec/veh):

Optimal Cycle:

66

Level Of Service: 14.1 \* Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Ovl Include Include Ovl Min. Green: 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 2 0 1 1 0 2 0 0 0 0 0 0 0 1 0 0 0 1 Volume Module: Base Vol: 0 1125 10 245 1990 0 0 0 n 85 0 330 PHF Volume: 0 1250 11 272 2211 0 0 0 0 94 0 367 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1250 11 272 2211 0 0 0 0 94 0 367 Saturation Flow Module: Adjustment: 1.00 0.90 0.81 0.90 0.90 1.00 1.00 1.00 1.00 0.93 1.00 0.83 Capacity Analysis Module: Vol/Sat: 0.00 0.36 0.01 0.16 0.64 0.00 0.00 0.00 0.00 0.05 0.00 0.23 Crit Moves: \*\*\*\* \* \* \* \* \*\*\*\* Green/Cycle: 0.00 0.57 0.66 0.25 0.82 0.00 0.00 0.00 0.00 0.09 0.00 0.34 Volume/Cap: 0.00 0.64 0.01 0.64 0.79 0.00 0.00 0.00 0.00 0.57 0.00 0.68 Delay/Veh: 0.0 15.3 5.8 36.9 6.2 0.0 0.0 0.0 0.0 48.3 0.0 31.8 AdjDel/Veh: 0.0 15.3 5.8 36.9 6.2 0.0 0.0 0.0 0.0 48.3 0.0 31.8 LOS by Move: A B A D A A A A A D A HCM2kAvgQ: 0 14 0 8 20 0 0 0 0 4 0 С \* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #21 SR 99 / Bishop Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.817 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 73 Level Of Service: Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Volume Module: Base Vol: 0 1075 125 30 1970 0 0 0 0 170 Ω 150 PHF Volume: 0 1194 139 33 2189 0 0 0 189 0 167 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1194 139 33 2189 0 0 0 189 0 167 FinalVolume: 0 1194 139 33 2189 0 0 0 189 0 167 -----| Saturation Flow Module: Capacity Analysis Module: Vol/Sat: 0.00 0.39 0.39 0.02 0.64 0.00 0.00 0.00 0.00 0.11 0.00 0.11 Crit Moves: \*\*\*\* \*\*\* Green/Cycle: 0.00 0.74 0.87 0.04 0.78 0.00 0.00 0.00 0.00 0.13 0.00 0.17 Volume/Cap: 0.00 0.53 0.45 0.53 0.82 0.00 0.00 0.00 0.00 0.82 0.00 0.63 Delay/Veh: 0.0 5.7 1.4 55.7 8.8 0.0 0.0 0.0 0.0 62.2 0.0 43.6 AdjDel/Veh: 0.0 5.7 1.4 55.7 8.8 0.0 0.0 0.0 0.0 62.2 0.0 43.6 LOS by Move: A A A E A A A A A E A HCM2kAvgQ: 0 9 5 2 23 0 0 0 0 8 0 D \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #22 township Rd / Paseo Rd \* Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[ 14.8] \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Rights:
 Include
 Include
 Include
 Include

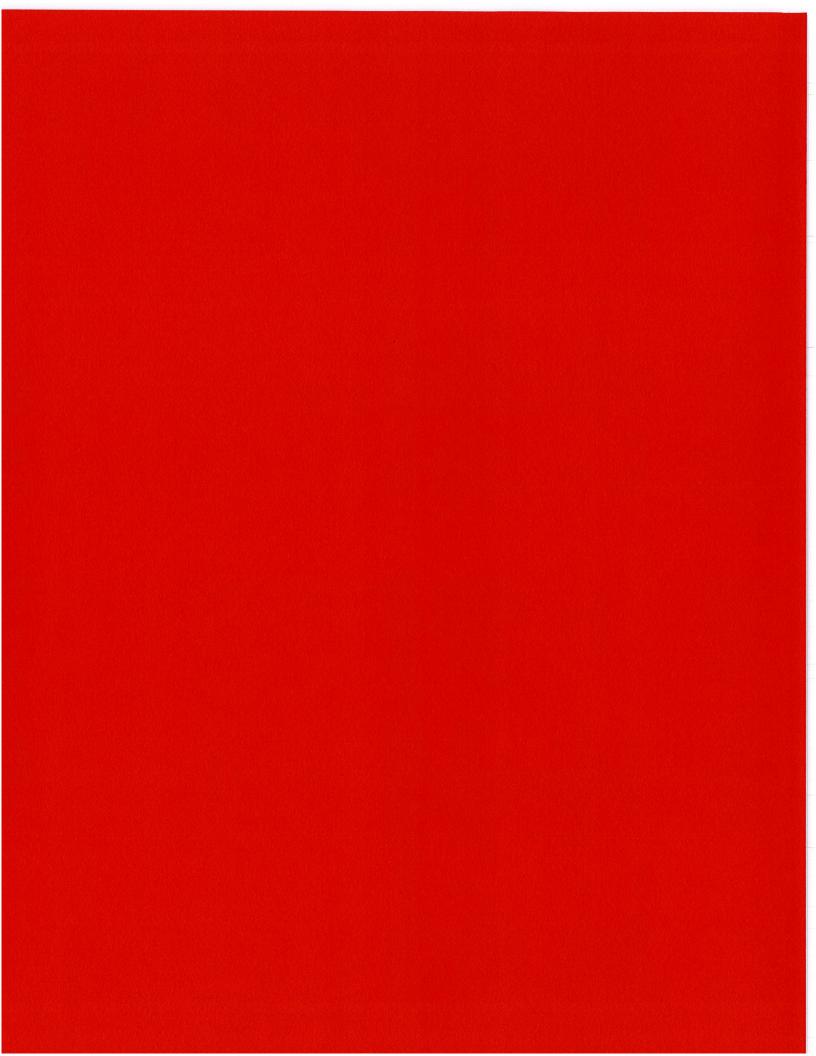
 Lanes:
 0 0 0 1 0 0 1 0 0 0 0 0 1! 0 0 0 0 0 1! 0 0
 0 0 1! 0 0
 0 0 1! 0 0
 Volume Module: 80 320 Base Vol: 0 105 95 0 0 0 Ω 105 80 320 PHF Volume: 0 105 95 80 320 0 0 0 105 0 70 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 105 95 80 320 0 0 0 0 105 0 70 Critical Gap Module: Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 6.4 6.5 6.2 FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 -----||----||----||-----| Capacity Module: ------| Level Of Service Module: LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* Movement: LT - LTR - RT SharedQueue:xxxxx xxxxx xxxxx 0.2 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1.4 xxxxx Shrd ConDel:xxxxx xxxxx xxxxx 7.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 14.8 xxxxx xxxxxx \* ApproachLOS: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #23 Larkin Road / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.844 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R -----| -----||-----||-----| Volume Module: Base Vol: 65 105 40 200 160 15 40 180 115 55 115 Initial Bse: 65 105 40 200 160 15 40 180 115 55 115 PHF Volume: 72 117 44 222 178 17 44 200 128 61 128 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 156 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 72 117 44 222 178 17 44 200 128 61 128 0 FinalVolume: 72 117 44 222 178 17 44 200 128 61 128 156 -----| Saturation Flow Module: Capacity Analysis Module: Vol/Sat: 0.55 0.55 0.55 0.84 0.84 0.84 0.76 0.76 0.76 0.71 0.71 0.71 Crit Moves: \*\*\*\* \*\*\*\* \* \* \* \* Delay/Veh: 17.2 17.2 17.2 34.2 34.2 34.2 25.5 25.5 25.5 22.7 22.7 22.7 AdjDel/Veh: 17.2 17.2 17.2 34.2 34.2 34.2 25.5 25.5 25.5 22.7 22.7 22.7 LOS by Move: C C C D D D D D СС С ApproachDel: 17.2
Delay Adj: 1.00
ApprAdjDel: 17.2
LOS by Appr: C 34.2 25.5 22.7 1.00 1.00 1.00 1.00 17.2 34.2 25.5 22.7 D D C AllWayAvgQ: 0.8 0.8 0.8 3.3 3.3 3.3 2.1 2.1 2.1 1.7 1.7 \* Note: Queue reported is the number of cars per lane. \*

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #24 SR 99 / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.108 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: \* Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R -----| Control: Protected Protected Protected Protected Rights: Include Include Ovl Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 Volume Module: Base Vol: 325 1110 10 1880 15 40 10 50 430 80 65 PHF Adj: PHF Volume: 361 1233 17 11 2089 44 11 56 478 89 72 17 ٥ 17 Saturation Flow Module: Capacity Analysis Module: Vol/Sat: 0.11 0.36 0.36 0.01 0.62 0.62 0.01 0.03 0.30 0.05 0.05 0.05 Crit Moves: \*\*\*\* \* \* \* \* \*\*\*\* \*\*\* Green/Cycle: 0.10 0.65 0.65 0.01 0.56 0.56 0.02 0.17 0.27 0.05 0.20 0.20 Volume/Cap: 1.11 0.56 0.56 0.56 1.11 1.11 0.25 0.17 1.11 1.11 0.25 0.25 Delay/Veh: 127.1 10.1 10.1 81.3 78.6 78.6 50.8 35.4 112.2 180.4 34.4 34.4 AdjDel/Veh: 127.1 10.1 10.1 81.3 78.6 78.6 50.8 35.4 112.2 180.4 34.4 34.4 LOS by Move: F B B F E E D D F F C C HCM2kAvqQ: 11 11 11 1 52 52 1 2 24 6 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #25 SR 99 / APRICOT \* Average Delay (sec/veh): 610900.4 Worst Case Level Of Service: F[xxxxx] \*\*\*\*\*\*\*\*\* Street Name: SR 99 APRICOT Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R -----| -----|----|-----| Volume Module: Base Vol: 210 1255 0 0 1630 350 340 0 210 0 Initial Bse: 210 1255 0 0 1630 350 340 0 210 0 0 PHF Adj: PHF Volume: 233 1394 0 0 1811 389 378 0 233 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 233 1394 0 0 1811 389 378 0 233 0 0 Ω Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 xxxxx xxxxx xxxxx FollowUpTim: 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 xxxxx xxxx xxxxx Capacity Module: Cnflict Vol: 2200 xxxx xxxxx xxxxx xxxx xxxxx 3672 3672 1811 xxxx xxxx xxxxx 1.00 xxxx xxxx xxxx xxxx xxxx xxxx 0.00 2.39 xxxx xxxx xxxx Volume/Cap: Level Of Service Module: Movement: LT - LTR - RT SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 79.3 xxxxx xxxxx xxxx xxxxx F ApproachLOS: \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #26 SR 99 / ASH ST \* Average Delay (sec/veh): 425.1 Worst Case Level Of Service: F(12104.7) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: SR 99 North Bound South Bound East Bound West Bound L - T - R L - T - R Approach: North Bound Movement: Volume Module: 15 1850 Base Vol: 0 1460 110 0 0 110 Initial Bse: 0 1460 110 15 1850 0 0 0 0 110 0 PHF Volume: 0 1622 122 17 2056 0 0 0 122 0 17 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1622 122 17 2056 0 0 0 0 122 0 17 Critical Gap Module: FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxx xxxxx 3.5 4.0 3.3 -----| Capacity Module: Potent Cap.: xxxx xxxx xxxx 352 xxxx xxxx xxxx xxxx xxxx xxxx 5 5 127 Move Cap.: xxxx xxxx xxxx 352 xxxx xxx xxxx xxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxx xxxx xxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxx xxxx xxx xx xxx xx -----| Level Of Service Module: Movement: LT - LTR - RT \* Note: Queue reported is the number of cars per lane. \*



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2030 GPU mitigated 1690-10 LIVE OAK GPU

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Scenario Report

Scenario: GPU KOLA PM

Command: Default Command
Volume: GPU KOLA PM
Geometry: existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Intersection Volume Report Base Volume Alternative

								<b>-</b>					
		Northbound		Southbound		Eastbound		Westbound					
Node	Intersection	L ·	Т -	- R	L ·	T -	R	L -	- T -	- R	L -	- T -	- R
1	Township Rd /	0	215	90	240	240	0	0	0	0	105	0	75
2	SR 99 / Rivei	90	1080	25	10	770	10	85	55	140	15	35	15
3	Larkin Road /	30	550	20	35	540	15	30	40	20	30	35	5
5	SR 99 / Ramsd	40	1585	395	35	1265	5	15	80	85	470	60	35
6	SR 99 / Kola	110	1755	25	150	1405	325	295	150	50	25	160	75
7	Pengtn / Town	45	365	65	35	235	35	60	45	20	45	75	35
8	Pennington Rd	10	40	10	55	45	65	60	50	10	20	130	110
9	Pennington Rd	60	0	135	0	0	0	0	55	55	175	145	0
10	Pengtn Rd / N	50	180	265	130	170	45	45	195	35	290	165	125
11	Pengtn Rd / B	75	0	115	0	0	0	0	470	120	85	800	0
12	SR 99 / Penni	210	1470	40	35	1300	180	310	120	195	135	175	50
13	Pengtn Rd / L	40	280	50	185	185	250	105	115	20	30	140	90
14	Pengtn Rd / O	0	0	0	130	0	175	120	170	0	0	115	160
15	Pengtn Rd / S	105	35	5	15	35	105	95	60	115	5	100	15
17	Elm Street /	5	365	40	5	270	15	5	5	5	45	25	50
18	SR 99 / Elm S	180	1550	190	15	1615	5	5	15	140	180	15	15
19	SR 99 / Arche	0	1905	200	10	2060	0	0	0	0	80	0	15
20	SR 99 / Colem	0	2005	120	565	1615	0	0	0	0	40	0	245
21	SR 99 / Bisho	0	1840	205	130	1595	0	0	0	0	95	0	70
22	township Rd /	0	350	105	65	205	0	0	0	0	95	0	70
23	Larkin Road /	75	225	30	70	195	45	65	155	40	80	80	175
24	SR 99 / Paseo	613	2035	100	10	1550	5	10	45	245	120	75	95
25	SR 99 / APRIC	195	1780	0	0	1785	360	360	0	195	0	0	0
26	SR 99 / ASH	0	1970	115	10	1990	0	0	0	0	115	0	10

#### Impact Analysis Report Level Of Service

Intersection	Base Del/ V/	Future Del/ V/	Change in
# 1 Township Rd / Riviera Rd	LOS Veh C D 33.3 0.000	LOS Veh C D 33.3 0.000	+ 0.000 D/V
# 2 SR 99 / Riveira Rd	B 18.1 0.543	в 18.1 0.543	+ 0.000 D/V
# 3 Larkin Road / Riviera Road	E 47.3 0.000	E 47.3 0.000	+ 0.000 D/V
# 5 SR 99 / Ramsdell Drive	D 47.0 1.009	D 47.0 1.009	+ 0.000 D/V
# 6 SR 99 / Kola Street	E 74.5 1.083	E 74.5 1.083	+ 0.000 D/V
# 7 Pengtn / Township	C 16.9 0.756	C 16.9 0.756	+ 0.000 V/C
# 8 Pennington Rd / Luther Rd	в 14.1 0.000	в 14.1 0.000	+ 0.000 D/V
# 9 Pennington Rd / Richard Ave	в 12.5 0.000	в 12.5 0.000	+ 0.000 D/V
# 10 Pengtn Rd / N Street	D 47.8 0.850	D 47.8 0.850	+ 0.000 D/V
# 11 Pengtn Rd / Broadway	F 93.7 0.000	F 93.7 0.000	+ 0.000 D/V
# 12 SR 99 / Pennington Rd	D 41.5 0.959	D 41.5 0.959	+ 0.000 D/V
# 13 Pengtn Rd / Larkin Road	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 14 Pengtn Rd / Orchard Rd	C 25.1 0.491	C 25.1 0.491	+ 0.000 D/V
# 15 Pengtn Rd / Sinnard Ave	A 9.7 0.388	A 9.7 0.388	+ 0.000 V/C
# 17 Elm Street / N Street	в 11.8 0.565	в 11.8 0.565	+ 0.000 V/C
# 18 SR 99 / Elm Street	D 35.9 0.948	D 35.9 0.948	+ 0.000 D/V
# 19 SR 99 / Archer Ave	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V
# 20 SR 99 / Coleman Rd	D 45.6 1.081	D 45.6 1.081	+ 0.000 D/V
# 21 SR 99 / Bishop Ave	в 12.1 0.848	в 12.1 0.848	+ 0.000 D/V
# 22 township Rd / Paseo Rd	C 18.8 0.000	C 18.8 0.000	+ 0.000 D/V
# 23 Larkin Road / Paseo Rd	C 20.2 0.697	C 20.2 0.697	+ 0.000 V/C
# 24 SR 99 / Paseo Rd	C 28.4 0.881	C 28.4 0.881	+ 0.000 D/V
# 25 SR 99 / APRICOT	F OVRFL 0.000	F OVRFL 0.000	+ 0.000 D/V

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GPU KOLA PM

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2030 GPU mitigated 1690-10 LIVE OAK GPU

\_\_\_\_\_\_\_ Base Future Change
Del/ V/ Del/ V/ in
LOS Veh C LOS Veh C
F OVRFL 0.000 F OVRFL 0.000 + 0.000 D/V Intersection

# 26 SR 99 / ASH ST

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #1 Township Rd / Riviera Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 8.4 Worst Case Level Of Service: D[ 33.3] \* Riviera Street Name: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|----|-----|------| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include 
 Include
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 Include
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 1 0 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 1! 0 0
 -----| Volume Module: PHF Volume: 0 226 95 253 253 0 0 0 0 111 0 79 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 226 95 253 253 0 0 0 0 111 0 79 -----|----|-----|------| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxx 3.5 4.0 Capacity Module: 765 -----|----|-----|------||-------| Level Of Service Module: A \* \* \* \* \* \* \* \* LOS by Move: \* \* \* LT - LTR - RT LT - LTR - RT LT - LTR - RT Movement: LT - LTR - RT ApproachDel: xxxxxx ApproachLOS: Note: Queue reported is the number of cars per lane. \*

2030 GPU mitigated 1690-10 LIVE OAK GPU

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)							
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Intersection #2 SR 99 / Riveira ************************************		******	******				
Cycle (sec): 100		al Vol./Cap.(X):	0.543				
Loss Time (sec): $12 (Y+R=4)$		e Delay (sec/veh):					
Optimal Cycle: 44		Of Service:	В				
*********							
Approach: North Bound	South Bound	East Bound	West Bound				
	- T - R	L - T - R	L - T - R				
Control: Protected	Protected	Protected	Protected				
Rights: Include	Include	Include	Include				
Min. Green: 0 0 0	0 0 0	0 0 0	0 0 0				
	0 1 1 0	1 0 0 1 0	1 0 0 1 0				
Volume Module:			,				
Base Vol: 90 1080 25	10 770 10	85 55 140	15 35 15				
Growth Adj: 1.00 1.00 1.00 1.0	00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00				
Initial Bse: 90 1080 25	10 770 10	85 55 140	15 35 15				
_	00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00				
-	95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95				
	11 811 11	89 58 147	16 37 16				
Reduct Vol: 0 0 0	0 0 0	0 0 0	0 0 0				
	11 811 11	89 58 147	16 37 16				
<u> </u>	00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00				
-	00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00				
	11 811 11	89 58 147	16 37 16				
Saturation Flow Module:							
	00 1900 1900	1900 1900 1900	1900 1900 1900				
<del>-</del>	90 0.90 0.90	0.93 0.87 0.87	0.93 0.94 0.94				
	00 1.97 0.03	1.00 0.28 0.72	1.00 0.70 0.30				
	18 3386 44	1769 468 1192	1769 1245 533				
Capacity Analysis Module:							
	01 0.24 0.24	0.05 0.12 0.12	0.01 0.03 0.03				
0110 110 000.		****	* * * *				
	01 0.52 0.52	0.15 0.23 0.23	0.02 0.09 0.09				
<del>-</del>	54 0.46 0.46	0.33 0.54 0.54	0.54 0.33 0.33				
<u>-</u>	.3 15.5 15.5	38.4 35.7 35.7	68.3 43.9 43.9				
	00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00				
•	.3 15.5 15.5 E B B	38.4 35.7 35.7 D D D	68.3 43.9 43.9				
HCM2kAvqQ: 3 11 11	в в в 188	<del>_</del>	E D D				
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2030 GPU mitigated 1690-10 LIVE OAK GPU

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #3 Larkin Road / Riviera Road \* Average Delay (sec/veh): 5.6 Worst Case Level Of Service: E[ 47.3] Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 0 1 0 1 0 0 1 0 <del>-----</del>|-----||------| Volume Module: Base Vol: 30 550 20 35 540 15 30 40 20 30 35 <del>-----</del>|----|----|-----||------||------| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 ~~~~~~~| -----| | ------| | -------| | ------| Capacity Module: Cnflict Vol: 584 xxxx xxxxx 600 xxxx xxxxx 1324 1313 576 1334 1311 Potent Cap.: 981 xxxx xxxxx 967 xxxx xxxxx 132 157 513 130 157 504 Move Cap.: 981 xxxx xxxxx 967 xxxx xxxxx 100 146 513 92 147 504 Volume/Cap: 0.03 xxxx xxxx 0.04 xxxx xxxx 0.32 0.29 0.04 0.34 0.25 0.01 -----||-----| Level Of Service Module: 2Way95thQ: 0.1 xxxx xxxxx 0.1 xxxx xxxxx 1.2 xxxx xxxxx 1.3 xxxx xxxxx Control Del: 8.8 xxxx xxxxx 8.9 xxxx xxxxx 57.0 xxxx xxxxx 63.6 xxxx xxxxx A \* \* A \* \* A \* \* F \* \* F \* \* LT - LTR - RT LT - LTR - RT LT - LTR - RT LOS by Move: Movement: Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #5 SR 99 / Ramsdell Drive \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.009 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 47.0 Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Volume Module: Base Vol: 40 1585 395 35 1265 5 15 80 85 470 60 Initial Bse: 40 1585 395 35 1265 5 15 80 85 470 60 Saturation Flow Module: -----|-----||-------||-------| Capacity Analysis Module: Vol/Sat: 0.02 0.49 0.27 0.02 0.39 0.39 0.01 0.10 0.10 0.28 0.06 0.06 Crit Moves: \*\*\*\* \* \* \* \* \* \* \* \* Green/Cycle: 0.03 0.48 0.48 0.02 0.47 0.47 0.05 0.10 0.10 0.28 0.33 0.33 Volume/Cap: 0.82 1.01 0.56 1.01 0.82 0.82 0.17 1.01 1.01 1.01 0.17 0.17 Delay/Veh: 113.2 50.2 19.4 200.5 26.3 26.3 46.3 116 115.9 79.0 24.2 24.2 AdjDel/Veh: 113.2 50.2 19.4 200.5 26.3 26.3 46.3 116 115.9 79.0 24.2 24.2 LOS by Move: F D B F C C D F F E C C HCM2kAvgQ: 3 35 9 3 21 21 1 10 10 22 2 2 Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\* Intersection #6 SR 99 / Kola Street \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_| Control: Protected Protected Protected Protected Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 -----||-----||------| Volume Module: 295 150 Initial Bse: 110 1755 25 150 1405 325 50 25 160 PHF Adj: PHF Volume: 116 1847 26 158 1479 342 311 158 53 26 168 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: Reduced Vol: 116 1847 26 158 1479 342 311 158 53 26 168 79 Finalvolume: 116 1847 26 158 1479 342 311 158 53 26 168 79 Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.90 0.88 0.88 0.93 0.94 0.94 0.93 0.93 0.93 Lanes: 1.00 1.97 0.03 1.00 1.62 0.38 1.00 0.75 0.25 1.00 0.68 0.32 Final Sat.: 1718 3382 48 1718 2713 628 1769 1345 448 1769 1207 566 Capacity Analysis Module: Vol/Sat: 0.07 0.55 0.55 0.09 0.55 0.55 0.18 0.12 0.12 0.01 0.14 0.14 Crit Moves: \*\*\*\* \*\*\*\* Green/Cycle: 0.06 0.50 0.50 0.08 0.52 0.52 0.16 0.26 0.26 0.03 0.13 0.13 Volume/Cap: 1.04 1.08 1.08 1.08 1.04 1.04 1.08 0.45 0.45 0.45 1.08 1.08 Delay/Veh: 143.1 72.8 72.8 144.3 56.4 56.4 119.0 31.9 31.9 53.1 127 127.0 AdjDel/Veh: 143.1 72.8 72.8 144.3 56.4 56.4 119.0 31.9 31.9 53.1 127 127.0 LOS by Move: F E E F E E F C C D F F 17 6 6 1 14 HCM2kAvqQ: 7 44 44 10 40 40 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #7 Pengtn / Township \* Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: \* Street Name: Pennington Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - F L - T - R Volume Module: Base Vol: 45 365 65 35 235 35 60 45 20 45 75 35 FinalVolume: 47 384 68 37 247 37 63 47 21 47 79 37 -----| Saturation Flow Module: Lanes: 0.09 0.77 0.14 0.11 0.78 0.11 0.48 0.36 0.16 0.29 0.48 0.23 Final Sat.: 63 508 90 71 473 71 236 177 79 148 247 115 -----| Capacity Analysis Module: Vol/Sat: 0.76 0.76 0.76 0.52 0.52 0.52 0.27 0.27 0.27 0.32 0.32 0.32 ApproachDel: 22.0 1.00 1.00 1.00 LOS by Appr: 1.00 1.00 1.00 14.0 11.4 11.7 В В В AllWayAvgQ: 2.5 2.5 2.5 0.9 0.9 0.9 0.3 0.3 0.4 0.4 0.4 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #8 Pennington Rd / Luther Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 6.2 Worst Case Level Of Service: B[ 14.1] \*\*\*\*\*\*\*\*\*\*\*\* North Bound South Bound East Bound West Bound Movement: -----|----|-----|------| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 10 40 10 55 45 65 60 50 10 20 130 110 Initial Bse: 10 40 10 55 45 65 60 50 10 20 130 110 PHF Volume: 11 42 11 58 47 68 63 53 11 21 137 116 Reduct Vol: FinalVolume: 11 42 11 58 47 68 63 53 11 21 137 116 -----| Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----|----|-----|------| Capacity Module: 58 447 426 Cnflict Vol: 479 479 195 253 xxxx xxxxx 63 xxxx xxxxx Potent Cap.: 500 489 1014 521 520 847 1295 xxxx xxxxx 1521 xxxx xxxxx Move Cap.: 405 458 1014 457 487 847 1295 xxxx xxxxx 1521 xxxx xxxxx Volume/Cap: 0.03 0.09 0.01 0.13 0.10 0.08 0.05 xxxx xxxx 0.01 xxxx xxxx -----|----|-----| Level Of Service Module: 7.4 xxxx xxxxx LOS by Move: \* \* \* \* \* \* \* \* \* A \* \* Movement: LT - LTR - RT Shared LOS: \* B \* \* B \* \* \* \* \* \* \* xxxxxx ApproachDel: 13.4
ApproachLOS: B xxxxxx 14.1 В \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\* Intersection #9 Pennington Rd / Richard Ave \* Average Delay (sec/veh): 6.1 Worst Case Level Of Service: B[ 12.5] Street Name: Richard Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_| \_\_\_\_\_| Volume Module: 55 55 175 145 Base Vol: 60 0 135 0 0 0 0 0 0 0 0 55 55 175 145 0 Initial Bse: 60 0 135 PHF Volume: 63 0 142 0 0 0 0 58 58 184 153 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 63 0 142 0 0 0 0 58 58 184 153 n -----| Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx 2.2 xxxx xxxxx \_\_\_\_\_| Capacity Module: 87 xxxx xxxx xxxxx xxxx xxxx xxxxx 116 xxxx xxxxx Cnflict Vol: 608 608 Potent Cap.: 459 410 Move Cap.: 409 352 Volume/Cap: \_\_\_\_\_| Level Of Service Module: A \* \* LOS by Move: \* \* \* \* \* \* \* \* Movement: LT - LTR - RT Shared LOS: \* B \* \* \* \* \* \* \* \* \* \* ApproachDel: 12.5 xxxxxx xxxxxx A \* xxxxxx В ApproachLOS: Note: Oueue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\* \_\_\_\_\_\_

2030 GPU mitigated

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #10 Pengtn Rd / N Street \* Cycle (sec): 100 Critical Vol./Cap.(X): 0.850 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 91 Level Of Service: \* Street Name: N Street Pennington Approach: North Bound South Bound East Bound Movement: L - T - R L - T - RWest Bound  $\mathbf{L}$  -  $\mathbf{T}$  -  $\mathbf{R}$ -----| 
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 Volume Module: Base Vol: 50 180 265 130 170 45 45 195 35 290 165 125 Initial Bse: 50 180 265 130 170 45 45 195 35 290 165 125 PHF Volume: 53 189 279 137 179 47 47 205 37 305 174 132 Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.94 0.94 0.94 0.93 0.91 0.91 0.93 0.87 0.87 Lanes: 0.10 0.36 0.54 0.38 0.49 0.13 1.00 1.70 0.30 1.00 1.14 0.86 Final Sat.: 174 625 920 676 884 234 1769 2930 526 1769 1882 1426 -----| Capacity Analysis Module: Vol/Sat: 0.30 0.30 0.30 0.20 0.20 0.20 0.03 0.07 0.07 0.17 0.09 0.09 \*\*\* \* \* \* \* \*\*\*\* Crit Moves: Green/Cycle: 0.36 0.36 0.36 0.24 0.24 0.24 0.06 0.08 0.08 0.20 0.22 0.22 Volume/Cap: 0.85 0.85 0.85 0.85 0.85 0.85 0.42 0.85 0.85 0.85 0.42 0.42 LOS by Move: D D D D D HCM2kAvgQ: 18 18 18 13 13 D 13 D E 2 6 E Ε C 6 12 5 \* Note: Queue reported is the number of cars per lane.

1690-10 LIVE OAK GPU -----Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #11 Pengtn Rd / Broadway \*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 11.2 Worst Case Level Of Service: F[ 93.7] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Pennington Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R -----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 -----| Volume Module: Base Vol: 75 0 115 0 0 0 0 470 120 85 800 0 0 470 120 85 800 0 Initial Bse: 75 0 115 0 0 PHF Volume: 79 0 121 0 0 0 0 495 126 89 842 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 79 0 121 0 0 0 0 495 126 89 842 0 Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx Capacity Module: \_\_\_\_\_|\_\_|\_\_| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* A \* \* Movement: LT - LTR - RT ApproachLOS: Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*

2030 GPU mitigated 1690-10 LIVE OAK GPU -----Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #12 SR 99 / Pennington Rd \* Cycle (sec): 100 Critical Vol./Cap.(X): 0,959 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 146 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R 
 Control:
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Include
 Include< Volume Module: Base Vol: 210 1470 40 35 1300 180 310 120 195 135 175 Initial Bse: 210 1470 40 35 1300 180 310 120 195 135 175 50 PHF Volume: 221 1547 42 37 1368 189 326 126 205 142 184 53 -----| Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.90 0.89 0.89 0.93 0.84 0.84 0.93 0.90 0.90 Lanes: 1.00 1.95 0.05 1.00 1.76 0.24 1.00 1.00 1.00 1.00 1.56 0.44 Final Sat.: 1718 3332 91 1718 2964 410 1769 1604 1604 1769 2661 760 Capacity Analysis Module: Vol/Sat: 0.13 0.46 0.46 0.02 0.46 0.46 0.18 0.08 0.13 0.08 0.07 0.07 Crit Moves: \*\*\*\* \*\*\*\* \* \* \* \* \* \* \* \* Green/Cycle: 0.13 0.59 0.59 0.03 0.48 0.48 0.19 0.16 0.16 0.10 0.07 0.07 Volume/Cap: 0.96 0.79 0.79 0.79 0.96 0.96 0.48 0.79 0.79 0.96 0.96 Delay/Veh: 90.7 18.0 18.0 107.5 38.8 38.8 77.9 38.6 49.7 64.0 92.0 92.0 LOS by Move: F B B F D D E D D E F F HCM2kAvgQ: 11 21 21 3 30 30 15 4 8 6 7 7 \*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

1690-10 LIVE OAK GPU ------Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #13 Pengtn Rd / Larkin Road \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 539.2 Worst Case Level Of Service: F[1173.3] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Volume Module: 40 280 50 185 185 Base Vol: 250 105 115 20 30 140 Initial Bse: 40 280 50 185 185 105 115 30 140 250 20 PHF Volume: 42 295 53 195 195 263 111 121 21 32 147 95 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 42 295 53 195 195 263 111 121 21 32 147 95 Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----| Capacity Module: Cnflict Vol: 839 658 132 784 621 195 242 xxxx xxxxx 142 xxxx xxxxx Potent Cap.: 285 384 918 311 403 847 1324 xxxx xxxxx 1441 xxxx xxxxx Move Cap.: 104 342 918 74 359 847 1324 xxxx xxxxx 1441 xxxx xxxxx Volume/Cap: 0.41 0.86 0.06 2.64 0.54 0.31 0.08 xxxx xxxx 0.02 xxxx xxxx -----| Level Of Service Module: 7.6 xxxx xxxxx A \* \* A \* \* LOS by Move: \* \* \* \* \* Movement: LT - LTR - RT Shared LOS: \* F \* \* F \* \* \* \* \* \* \* 1173.3 xxxxxx \* xxxxxx ApproachDel: 202.4 ApproachLOS: F F \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. 

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1690-10 LIVE OAK GPU -----Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #14 Pengtn Rd / Orchard Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.491 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 40 Level Of Service: 25.1 Street Name: Pennington Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - F L - T - R -----| Volume Module: FinalVolume: 0 0 0 137 0 184 126 179 0 0 121 168 -----||-----||-----| Saturation Flow Module: Lanes: 0.00 1.00 0.00 0.43 0.00 0.57 1.00 1.00 0.00 1.00 0.42 0.58 Final Sat.: 0 1900 0 717 0 965 1769 1862 0 1900 711 989 Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.19 0.00 0.19 0.07 0.10 0.00 0.00 0.17 0.17 \* \* \* \* \* \* \* \* Crit Moves: Green/Cycle: 0.00 0.00 0.00 0.39 0.00 0.39 0.15 0.49 0.00 0.00 0.35 0.35 Volume/Cap: 0.00 0.00 0.00 0.49 0.00 0.49 0.20 0.00 0.00 0.49 0.49 0.0 0.0 0.0 23.7 0.0 23.7 40.8 14.4 0.0 0.0 26.4 26.4 Delay/Veh: AdjDel/Veh: 0.0 0.0 0.0 23.7 0.0 23.7 40.8 14.4 0.0 0.0 26.4 26.4 LOS by Move: A A A C A C D B A HCM2kAvgQ: 0 0 0 8 0 8 4 3 0 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

2030 GPU mitigated 1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \* Intersection #15 Pengtn Rd / Sinnard Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.388 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Street Name: Pennington North Bound South Bound East Bound West Bound L-T-R L-T-R Approach: North Bound Movement: -----|----|-----|------| 
 Control:
 Stop Sign
 Include
 Include< Volume Module: Base Vol: 105 35 5 15 35 105 95 60 115 5 100 Initial Bse: 105 35 5 15 35 105 95 60 115 5 100 15 PHF Volume: 111 37 5 16 37 111 100 63 121 5 105 16 FinalVolume: 111 37 5 16 37 111 100 63 121 5 105 16 -----| Saturation Flow Module: 

AdjDel/Veh: 9.7 9.7 9.0 9.0 9.0 10.4 10.4 10.4 9.1 9.1 9.1 A B B B A A LOS by Move: A A Α A A Α 9.0 10.4 9.1 9.7 ApproachDel: 1.00 1.00 1.00 1.00 Delay Adj: 9.7 9.0 ApprAdjDel: 10.4 9 1 LOS by Appr: Α В Α Α AllWayAvgQ: 0.3 0.3 0.3 0.3 0.3 0.6 0.6 0.6 0.2 0.2 

-----|

Vol/Sat: 0.24 0.24 0.24 0.23 0.23 0.23 0.39 0.39 0.39 0.19 0.19 0.19

\*\*\*\*

\* \* \* \*

Note: Queue reported is the number of cars per lane.

Capacity Analysis Module:

Crit Moves: \*\*\*\*

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ApproachDel: 13.2

Approaching Delay Adj: 1.00
ApprAdjDel: 13.2
Appr: B

2030 GPU mitigated

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #17 Elm Street / N Street \* Cycle (sec): 100 Critical Vol./Cap.(X): Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 0 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|----|-----|------| -----||-----||------| Volume Module: Base Vol: 5 365 40 5 270 15 5 5 45 25 Initial Bse: 5 365 40 5 270 15 5 5 45 25 50 Saturation Flow Module: Lanes: 0.01 0.89 0.10 0.02 0.93 0.05 0.34 0.33 0.33 0.37 0.21 0.42 Final Sat.: 9 681 75 13 682 38 184 184 184 227 126 252 Capacity Analysis Module: Vol/Sat: 0.56 0.56 0.56 0.42 0.42 0.42 0.03 0.03 0.03 0.21 0.21 0.21 \*\*\*\* \*\*\*\* \*\*\* Crit Moves: Delay/Veh: 13.2 13.2 13.2 11.0 11.0 11.0 8.8 8.8 9.7 9.7 AdjDel/Veh: 13.2 13.2 13.2 11.0 11.0 11.0 8.8 8.8 8.8 9.7 9.7 9.7 LOS by Move: B B B B B A A A A A Α

Note: Queue reported is the number of cars per lane.

11.0

1.00

AllwayAvgQ: 1.2 1.2 1.2 0.7 0.7 0.7 0.0 0.0 0.0 0.2 0.2

11.0

8.8

1.00

8.8

Α

9.7

1.00

9.7

2030 GPU

# mitigated

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #18 SR 99 / Elm Street \* Cycle (sec): 100 Critical Vol./Cap.(X): Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 138 Level Of Service: \* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ~~~~~~||-----||-----||-------||-------| 
 Control:
 Protected
 Protected
 Split Phase
 Split Phase

 Rights:
 Include
 Include
 Include

 Min. Green:
 0
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 -----| Volume Module: Base Vol: 180 1550 190 15 1615 5 15 140 180 15 15 Initial Bse: 180 1550 190 15 1615 5 5 15 140 180 15 15 -----||-----|-----| Saturation Flow Module: Adjustment: 0.90 0.89 0.89 0.90 0.90 0.90 0.86 0.86 0.86 0.93 0.93 0.93 Lanes: 1.00 1.78 0.22 1.00 1.99 0.01 0.03 0.09 0.88 0.86 0.07 0.07 Final Sat.: 1718 3012 369 1718 3426 11 51 154 1434 1515 126 126 Capacity Analysis Module: Vol/Sat: 0.11 0.54 0.54 0.01 0.50 0.50 0.10 0.10 0.10 0.13 0.13 0.13 Crit Moves: \*\*\*\* \* \* \* \* \* \* \* \* LOS by Move: F B B F C C F F F F F HCM2kAvgQ: 9 27 27 2 32 32 9 9 9 11 11 F Note: Oueue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*

2030 GPU mitigated 1690-10 LIVE OAK GPU

							. GFO					<b></b>
		]	Level (	of Serv	vice (	Computa	ation I	Report	t			
	2000 1		nsigna.			-		_		ive)		
********											****	*****
Intersection						* * * * * * :	* * * * * *	****	* * * * * * *	*****	****	*****
Average Delay									Of Sei		-	
Approach:	No	rth B	ound	Soi	ith Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:		-	- R						- R			
Control:	Un	contr	olled	Und	contro	olled	្ត នា	top S	ign	St	op Si	ign .
Rights:		Incl	ıde		Incl	ıde		Inclu	ıde		Incl	ıde
Lanes:			1 0			1 0			0 0			
	•											
Volume Modul												
Base Vol:		1905	200		2060	0	0	0	0	80	0	15
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1905	200		2060	0	0	0	0	80	0	15
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:		0.95	0.95		0.95	0.95		0.95	0.95	0.95	0.95	0.95
PHF Volume:		2005	211		2168	0	0	0	0	84	0	16
Reduct Vol:	0	-	0	0	0	0	0	0	0	0	0	0
FinalVolume:		2005	211		2168	0	0	0	0	84	0	16
Critical Gap												
Critical Gp::									XXXXX			6.2
FollowUpTim:									xxxxx		4.0	3.3
Capacity Mod												
Cnflict Vol:						xxxxx			xxxxx		4300	2111
Potent Cap.:						xxxxx			xxxxx	2	2	64
Move Cap.:						xxxxx			xxxxx	2	2	64
Volume/Cap:			xxxx		xxxx				XXXX			0.25
Level Of Ser				0 1								
2Way95thQ:						xxxxx			xxxxx			
Control Del:			*		XXXX *		*	*	xxxxx *	*	*	XXXXX
LOS by Move:				C								
Movement:						- RT			- RT		- LTR	
Shared Cap.:						XXXXX			XXXXX			XXXXX
SharedQueue:												
Shrd ConDel:	xxxxx *	XXXX *	*	xxxxx *			XXXXX	xxxx *		xxxxx *	XXXX	XXXXX
Shared LOS:			^			^	~		^		-	^
ApproachDel:	X	XXXXX *		X	*****		X	xxxxx		X	XXXXX	
ApproachLOS:	* * * * *		* * * * * * * *	*****		****	* * * * * * *	.,	*****	*****	F *****	*****
Note: Queue												
*********									* * * * * *	* * * * * *	* * * * *	*****
	^	^										

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\* Intersection #20 SR 99 / Coleman Rd \* 9 (Y+R=4.0 sec) Average Delay (sec/veh): Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_|\_\_\_|\_\_\_| -----|----|-----||------||------| Volume Module: Base Vol: 0 2005 565 1615 0 0 0 40 120 PHF Volume: 0 2111 126 595 1700 0 0 0 0 42 0 258 Reduct Vol: 0 0 0 1211 126 595 1700 0 0 0 0 0 258 FinalVolume: 0 2111 126 595 1700 0 0 0 42 0 258 Saturation Flow Module: Capacity Analysis Module: Vol/Sat: 0.00 0.61 0.08 0.35 0.49 0.00 0.00 0.00 0.00 0.02 0.00 0.16 Crit Moves: \*\*\*\* Green/Cycle: 0.00 0.57 0.59 0.32 0.89 0.00 0.00 0.00 0.00 0.02 0.00 0.34 Volume/Cap: 0.00 1.08 0.14 1.08 0.56 0.00 0.00 0.00 0.00 1.08 0.00 0.48 0.0 67.9 9.2 96.2 1.5 0.0 0.0 0.0 0.0 218.3 0.0 26.5 Delay/Veh: AdjDel/Veh: 0.0 67.9 9.2 96.2 1.5 0.0 0.0 0.0 0.0 218.3 0.0 26.5 LOS by Move: A E A F A A A A A F A C HCM2kAvgQ: 0 49 2 28 7 0 0 0 0 4 0 7 \* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #21 SR 99 / Bishop Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 0.848 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 82 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|----|-----|-----||------| 
 Control:
 Protected
 Protected
 Split Phase
 Split Phase

 Rights:
 Ovl
 Include
 Include
 Ovl

 Min. Green:
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0

 Lanes:
 0 0 1 1 0 0 1 0 2 0 0 0 0 0 0 0 0 0 0 1
 Volume Module: Base Vol: 0 1840 205 130 1595 0 0 0 95 0 70 0 Initial Bse: 0 1840 205 130 1595 0 0 0 95 0 70 Saturation Flow Module: Adjustment: 1.00 0.89 0.89 0.90 0.90 1.00 1.00 1.00 1.00 0.93 1.00 0.83 Lanes: 0.00 1.80 0.20 1.00 2.00 0.00 0.00 0.00 1.00 0.00 1.00 Final Sat.: 0 3046 339 1718 3437 0 0 0 0 1769 0 1583 Capacity Analysis Module: Vol/Sat: 0.00 0.64 0.64 0.08 0.49 0.00 0.00 0.00 0.00 0.06 0.00 0.05 Crit Moves: \*\*\*\* \*\*\* \*\*\*\* Green/Cycle: 0.00 0.75 0.82 0.09 0.84 0.00 0.00 0.00 0.00 0.07 0.00 0.16 Volume/Cap: 0.00 0.85 0.78 0.85 0.58 0.00 0.00 0.00 0.00 0.85 0.00 0.29 AdjDel/Veh: 0.0 11.5 6.1 76.8 2.7 0.0 0.0 0.0 0.0 86.8 0.0 37.6 LOS by Move: A B A E A A A A A F A D HCM2kAvgQ: 0 26 19 7 9 0 0 0 0 5 0 2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane.

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1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #22 township Rd / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 4.1 Worst Case Level Of Service: C[ 18.8] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R -----| 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Rights:
 Include
 Include
 Include

 Lanes:
 0 0 0 1 0 0 1 0 0 0 0 0 1! 0 0 0 0 1! 0 0
 0 0 1! 0 0 0 0 0 0 0 0
 -----|----|-----|------| Volume Module: PHF Volume: 0 368 111 68 216 0 0 0 0 100 0 74 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 368 111 68 216 0 0 0 0 100 0 74 Critical Gap Module: Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 Capacity Module: \_\_\_\_\_\_|\_\_\_|\_\_\_|\_\_\_| Level Of Service Module: LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx 432 xxxxx SharedOueue:xxxxx xxxx xxxxx 0.2 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1.9 xxxxx Shrd ConDel:xxxxx xxxxx xxxxx 8.6 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 18.8 xxxxx ApproachLOS: \_\_\_\_ Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 2030 GPU mitigated 1690-10 LIVE OAK GPU

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #23 Larkin Road / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R -----|----|-----| ---|------||------||------||------| Volume Module: Base Vol: 75 225 30 70 195 65 155 45 40 80 80 175 Initial Bse: 75 225 30 70 195 45 65 155 40 80 80 175 MLF Adj: FinalVolume: 79 237 32 74 205 47 68 163 42 84 84 184 Saturation Flow Module: Capacity Analysis Module: Vol/Sat: 0.70 0.70 0.70 0.66 0.66 0.66 0.59 0.59 0.59 0.69 0.69 0.69 Crit Moves: \*\*\*\* \*\*\*\* Delay/Veh: 21.7 21.7 21.7 20.1 20.1 20.1 17.6 17.6 17.6 20.7 20.7 20.7 AdjDel/Veh: 21.7 21.7 21.7 20.1 20.1 20.1 17.6 17.6 17.6 20.7 20.7 20.7 LOS by Move: C C 20.1 17.6 20.7 ApproachDel: 21.7 Delay Adj: 1.00 ApprAdjDel: 21.7 LOS by Appr: C 1.00 1.00 1.00 1.00 20.1 17.6 20.7 C C C AllwayAvgO: 1.7 1.7 1.7 1.4 1.4 1.4 1.0 1.0 1.6 1.6 Note: Queue reported is the number of cars per lane. 

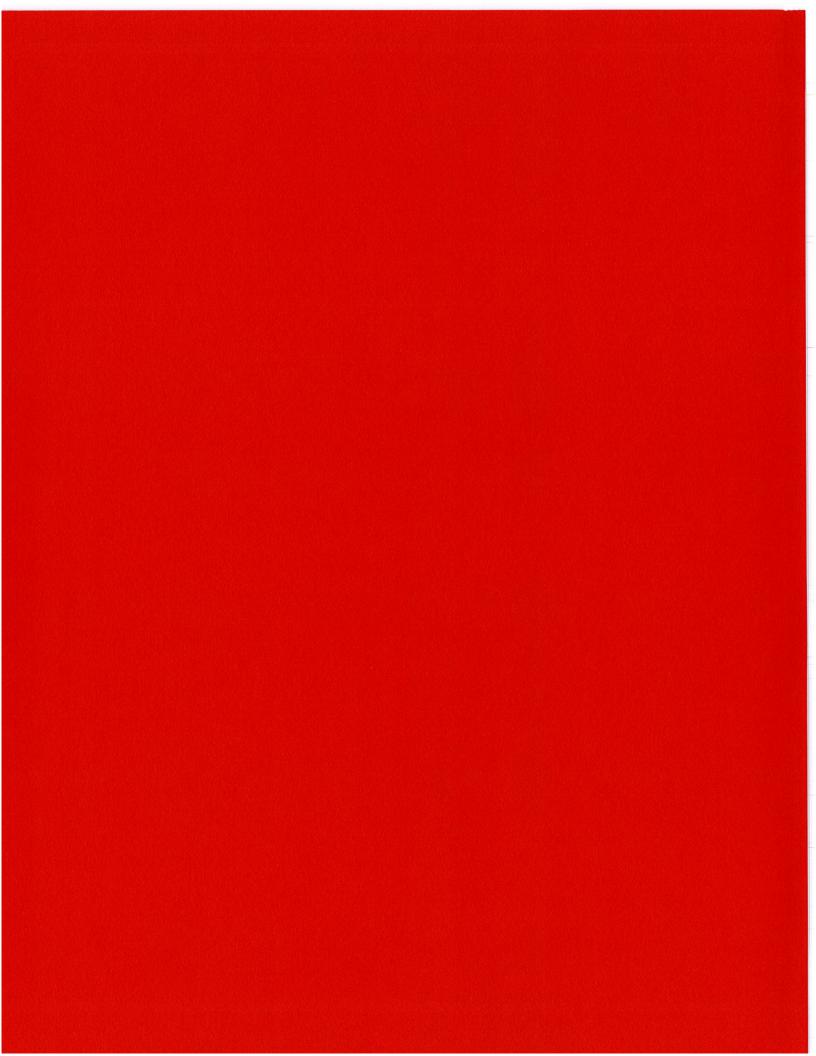
#### 2030 GPU mitigated 1690-10 LIVE OAK GPU

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #24 SR 99 / Paseo Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): Loss Time (sec): 12 (Y+R=4.0 sec)
Optimal Cycle: 102 12 (Y+R=4.0 sec) Average Delay (sec/veh): Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|----|-----|------| Volume Module: Base Vol: 613 2035 100 10 1550 5 10 45 245 120 75 95 Initial Bse: 613 2035 100 10 1550 5 10 45 245 120 75 95 -----| Saturation Flow Module: Adjustment: 0.88 0.90 0.90 0.90 0.90 0.90 0.93 0.98 0.83 0.93 0.90 0.90 Final Sat.: 3334 3253 160 1718 3426 11 1769 1862 1583 1769 752 953 -----| Capacity Analysis Module: Vol/Sat: 0.19 0.66 0.66 0.01 0.48 0.48 0.01 0.03 0.16 0.07 0.10 0.10 \*\*\*\* \* \* \* \* \* \* \* \* Crit Moves: Green/Cycle: 0.22 0.75 0.75 0.01 0.54 0.54 0.01 0.03 0.25 0.09 0.12 0.12 Volume/Cap: 0.89 0.88 0.88 0.88 0.89 0.89 0.88 0.77 0.65 0.77 0.88 0.88 AdjDel/Veh: 50.8 13.3 13.3 244.5 26.2 26.2 244.6 91.8 37.3 64.0 76.3 LOS by Move: D B B F C C F F D E E HCM2kAvgQ: 13 30 30 1 27 27 1 3 8 6 8 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

2030 GPU mitigated 1690-10 LIVE OAK GPU \_\_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #25 SR 99 / APRICOT \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 44440.6 Worst Case Level Of Service: F[374310.6] Street Name: SR 99 APRICOT Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Volume Module: PHF Adj: PHF Volume: 205 1874 0 0 1879 379 379 0 205 0 0 0 Reduct Vol: 0 0 0 0 1879 379 379 0 205 0 0 0 FinalVolume: 205 1874 0 0 1879 379 379 0 205 0 0 0 ~**~~~~~~|~~~~|~~~~~**||------||-----||-----| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx xxxxx xxxx xxxxx 6.4 6.5 6.2 xxxxx xxxx xxxxx FollowUpTim: 2.2 xxxx xxxxx xxxxx xxxx xxxxx 3.5 4.0 3.3 xxxxx xxxx xxxxx -----| Capacity Module: Cnflict Vol: 2258 xxxx xxxxx xxxxx xxxx xxxxx 4163 4163 1879 xxxx xxxx xxxxx xxxx xxxx xxxx Volume/Cap: 0.93 xxxx xxxx xxxx xxxx xxxx xxxx 0.00 2.31 \_\_\_\_\_| Level Of Service Module: LOS by Move: F \* \* \* \* \* \* \* \* \* \* Movement: LT - LTR - RT SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 75.8 xxxxx xxxxx xxxxx xxxxx ApproachLOS: F \* Note: Oueue reported is the number of cars per lane.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



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2030 GPU

mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

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Scenario Report

Scenario: GPU KOLA AM

GPU KOLA AM

Command: Default Command

Volume: GPU KOLA AM

Geometry: existing

Impact Fee: Default Impact Fee

Trip Generation: Default Trip Generation

Trip Distribution: Default Trip Distribution

Paths: Default Path

Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

Intersection Volume Report

Base Volume Alternative

Node Intersection	Northbo L T -		Southbo L T -			stbou - T -			stbou - T -	
6 SR 99 / Kola	35 1110	15	85 1430	200	195	120	35	15	120	80
12 SR 99 / Penni	165 1110	15	130 1420	250	315	290	130	50	395	50
13 Pengtn Rd / L	30 125	60	120 120	150	145	275	30	30	205	50
18 SR 99 / Elm S	140 1200	185	60 1610	10	10	155	260	175	80	55
19 SR 99 / Arche	0 1380	5	0 1920	0	0	0	0	0	0	5
20 SR 99 / Colem	10 1130	5	130 2015	115	140	315	10	30	375	185
25 SR 99 / APRIC	0 1385	0	0 1920	0	0	0	0	0	0	0
26 SR 99 / ASH	0 1380	90	0 1850	0	0	0	0	0	0	90

2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

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#### Impact Analysis Report Level Of Service

Intersection	Base Del/ V/	Future Del/ V/	Change in
# 6 SR 99 / Kola Street	LOS Veh C C 32.3 0.919	LOS Veh C C 32.9 0.919	+ 0.615 D/V
# 12 SR 99 / Pennington Rd	D 54.4 1.029	E 72.2 1.113	+17.854 D/V
# 13 Pengtn Rd / Larkin Road	F 815.2 0.000	C 17.4 0.000	-797.749 D/
# 18 SR 99 / Elm Street	E 65.1 1.085	E 58.4 1.070	-6.622 D/V
# 19 SR 99 / Archer Ave	C 15.7 0.000	C 15.7 0.000	+ 0.000 D/V
# 20 SR 99 / Coleman Rd	D 51.7 1.056	D 51.7 1.056	+ 0.000 D/V
# 25 SR 99 / APRICOT	A 0.0 0.000	A 0.0 0.000	+ 0.000 D/V
# 26 SR 99 / ASH ST	C 21.3 0.000	C 21.3 0.000	+ 0.000 D/V

\_\_\_\_\_\_ 2030 GPU

mitigated - Coleman Alternative 1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #6 SR 99 / Kola Street \* Cycle (sec): 100 Critical Vol./Cap.(X): 0.919 12 (Y+R=4.0 sec) Average Delay (sec/veh): Loss Time (sec): Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/ven):
Optimal Cycle: 119 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| 
 Control:
 Protected
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 Include
 Include< -----|----|-----|------| Volume Module: 200 195 120 35 15 120 Base Vol: 35 1110 15 85 1430 Initial Bse: 35 1110 15 85 1430 200 195 120 35 15 120 80 PHF Volume: 39 1233 17 94 1589 222 217 133 39 17 133 \_\_\_\_\_| Saturation Flow Module: Lanes: 1.00 1.97 0.03 1.00 1.75 0.25 1.00 0.77 0.23 1.00 0.60 0.40 Final Sat.: 1718 3384 46 1718 2961 414 1769 1393 406 1769 1050 700 -----| Capacity Analysis Module: Vol/Sat: 0.02 0.36 0.36 0.05 0.54 0.54 0.12 0.10 0.10 0.01 0.13 0.13 \*\*\* Crit Moves: \*\*\*\* Green/Cycle: 0.02 0.53 0.53 0.08 0.58 0.58 0.13 0.25 0.25 0.02 0.14 Volume/Cap: 0.92 0.69 0.69 0.69 0.92 0.92 0.92 0.39 0.39 0.39 0.92 C LOS by Move: F B B E C HCM2kAvgQ: 3 16 16 4 31 F C C D E 10 5 5 1 10 31 Note: Queue reported is the number of cars per lane. \*

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2030 GPU

mitigated - Coleman Alternative 1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #12 SR 99 / Pennington Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.029 54.4 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 180 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - RControl: Protected Protected Protected Rights: Include \_\_\_\_\_| Volume Module: Base Vol: 165 1110 15 130 1420 250 50 395 50 315 290 130 PHF Volume: 183 1233 17 144 1578 278 350 322 144 56 439 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 \_\_\_\_\_| Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.90 0.90 0.81 0.93 0.89 0.89 0.93 0.92 0.92 Lanes: 1.00 1.97 0.03 1.00 2.00 1.00 1.00 1.38 0.62 1.00 1.78 0.22 Final Sat.: 1718 3384 46 1718 3437 1537 1769 2330 1045 1769 3087 391 Capacity Analysis Module: Vol/Sat: 0.11 0.36 0.36 0.08 0.46 0.18 0.20 0.14 0.14 0.03 0.14 0.14 Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* E E B F C C D F F LOS by Move: F C HCM2kAvgQ: 10 20 C 20 7 35 17 7 2 13 6 Note: Queue reported is the number of cars per lane. \* \_\_\_\_\_\_

#### 2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #13 Pengtn Rd / Larkin Road \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 273.3 Worst Case Level Of Service: F[815.2] \*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - RL - T - R -----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 1! 0 0 -----| | ------| | -------| | -------| Volume Module: 145 275 60 120 120 150 30 30 205 50 30 125 Base Vol: Initial Bse: 30 125 60 120 120 150 145 275 30 30 205 50 PHF Volume: 33 139 67 133 133 167 161 306 33 33 228 56 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 33 139 67 133 133 167 161 306 33 33 228 56 -----|----||------||------| Critical Gap Module: Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----| Capacity Module: Cnflict Vol: 1117 994 322 1069 983 256 283 xxxx xxxxx 339 xxxx xxxxx Potent Cap.: 185 245 719 199 249 783 1279 xxxx xxxxx 1220 xxxx xxxxx Volume/Cap: 0.53 0.68 0.09 1.82 0.64 0.21 0.13 xxxx xxxx 0.03 xxxx xxxx \_\_\_\_\_|\_\_|\_\_| Level Of Service Module: LOS by Move: \* \* \* \* \* \* A \* \* A \* \* LT - LTR - RT Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT ApproachDel: 217.7 ApproachLOS: F F Note: Queue reported is the number of cars per lane. \*

2030 GPU mitigated - Coleman Alternative

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #18 SR 99 / Elm Street \*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.085 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R 
 Control:
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 Protected
 Split Phase
 Split Phase

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 **-----**|-----|-----| Volume Module: 10 10 155 260 175 80 Base Vol: 140 1200 185 60 1610 55 Final Volume: 156 1333 206 67 1789 11 11 172 289 194 89 61 \_\_\_\_\_|\_\_|\_\_| Saturation Flow Module: Lanes: 1.00 1.73 0.27 1.00 1.99 0.01 0.06 0.94 1.00 0.69 0.31 1.00 Final Sat.: 1718 2918 450 1718 3412 21 113 1744 1583 1236 565 1583 \_\_\_\_\_| Capacity Analysis Module: Vol/Sat: 0.09 0.46 0.46 0.04 0.52 0.52 0.10 0.10 0.18 0.16 0.16 0.04 Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\* Green/Cycle: 0.08 0.52 0.52 0.04 0.48 0.48 0.17 0.17 0.17 0.15 0.15 0.15 Volume/Cap: 1.08 0.87 0.87 0.87 1.08 1.08 0.59 0.59 1.08 1.08 1.08 0.27 Delay/Veh: 145.5 26.2 26.2 110.0 74.8 74.8 41.3 41.3 121.2 122.9 123 38.6 Adjpel/Veh: 145.5 26.2 26.2 110.0 74.8 74.8 41.3 41.3 121.2 122.9 123 38.6 LOS by Move: F C C F E E D D F F F 43 HCM2kAvgQ: 10 25 25 4 43 6 16 15 15 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

2030 GPU

### mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #19 SR 99 / Archer Ave \* Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[ 15.7] Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R -----| Control: Uncontrolled Uncontrolled Stop Sign
Rights: Include Include Include
Lanes: 0 0 1 1 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 1 \_\_\_\_\_| Volume Module: Base Vol: 0 1380 5 0 1920 0 0 0 0 Initial Bse: 0 1380 5 0 1920 0 0 0 0 5 Critical Gap Module: -----| Capacity Module: -----| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* \* C Movement: LT - LTR - RT ApproachLOS: \* Note: Oueue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

1690-10 LIVE OAK GPU												
Level Of Service Computation Report  2000 HCM Operations Method (Base Volume Alternative)  ***********************************												
Intersection	#20 5	SR 99	/ Cole	man Ró	i : * * * * *	*****	****	****	*****	*****	****	*****
**************************************								56				
Optimal Cycle: 180 Level Of Service: D												
Approach: Movement:	L -	th Bo	- R	L -	ith Bo	- R	Ъ-	st Bo	- R	L -	st Bo	- R
Control: Rights: Min. Green:	Pr 0	otect Ovl 0	ed 0	Pr 0	otect Ov1 0	ed 0		otect Inclu 0	ed ide 0		otect Inclu 0	.ed
Lanes:	1 ( 										, <u> </u>	
Volume Module Base Vol:	10	1130	5	130	2015	115	140	315	10 1.00	30 1.00	375	185 1.00
Growth Adj: Initial Bse: User Adj:	10	1.00 1130 1.00	1.00 5 1.00	130	1.00 2015 1.00	1.00 115 1.00	1.00 140 1.00	315	1.00 10 1.00	30 1.00	375	185 1.00
PHF Adj: PHF Volume:	0.90 11	0.90 1256	0.90 6	0.90 144	0.90 2239	0.90 128	0.90 156	350	0.90 11	0.90	417	0.90 206
Reduct Vol: Reduced Vol: PCE Adi:		0 1256 1.00	0 6 1.00		0 2239 1.00	0 128 1.00	0 156 1.00	0 350 1.00	0 11 1.00	0 33 1.00	0 417 1.00	0 206 1.00
MLF Adj: FinalVolume:	1.00	1.00 1.256	1.00	1.00	1.00	1.00 128	1.00 156	1.00 350	1.00	1.00	1.00	1.00 206
Saturation F					<del>-</del>							<b>-</b>
Sat/Lane: Adjustment:	1900 0.90	1900 0.90 1.99	1900 0.90 0.01	0.90	1900 0.90 2.00	1900 0.81 1.00	0.95	1900 0.95 1.94	1900 0.95 0.06	0.93	1900 0.89 1.34	1900 0.89 0.66
Lanes: Final Sat.:	1718	3418	15	1718	3437	1537	1805	3481	111 	1769	2253	1111
Capacity Ana Vol/Sat:	lysis			'	0.65	0.08	0.09	0.10	0.10	•	0.18	0.18
Crit Moves: Green/Cycle:			0.55 0.67		**** 0.62 1.06	0.70 0.12		0.22	0.22		**** 0.18 1.06	0.18
Volume/Cap: Delay/Veh: User DelAdj:	347.6		17.1	55.0	55.4 1.00		135.7		34.6 1.00	51.6	93.9	93.9 1.00
AdjDel/Veh: LOS by Move:	347.6 F	20.7 C	17.1 B	E	55.4 E	A	135.7 F	C	34.6 C	51.6 D	93.9 F 17	93.9 F 17
HCM2kAvgQ: *******					****	*****			5 ******			
Note: Queue reported is the number of cars per lane. ************************************												

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2030 GPU

## mitigated - Coleman Alternative

1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #25 SR 99 / APRICOT \*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0] \*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\* Street Name: SR 99 APRICOT Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R\_\_\_\_\_| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 1 0 1 0 0 0 0 1 0 1 0 0 1! 0 0 0 0 0 0 -----|----|-----||-------||------| Volume Module: PHF Adj: PHF Volume: 0 1539 0 0 2133 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1539 0 0 2133 0 0 0 -----| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 xxxxx xxxx xxxxx FollowUpTim:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 xxxxx xxxx xxxxx \_\_\_\_\_\_ Capacity Module: Cnflict Vol: xxxx xxxx xxxxx xxxxx xxxx xxxxx 3672 3672 2133 xxxx xxxx xxxxx \_\_\_\_\_ Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* \* \* Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx xxxxx xxxxx \* ApproachLOS: \* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

GPU KOLA AM Tue Sep 29, 2009 14:44:35 Page 11-1 2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU \_\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #26 SR 99 / ASH ST \*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[ 21.3] \* Street Name: SR 99 ASH ST Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R -----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 1 1 0 0 0 2 0 0 0 0 0 0 0 0 0 0 1 Volume Module: Base Vol: 0 1380 90 0 1850 0 0 0 0 0 0 Initial Bse: 0 1380 90 0 1850 0 0 0 0 0 90 PHF Volume: 0 1533 100 0 2056 0 0 0 0 0 100 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1533 100 0 2056 0 0 0 0 0 0 0 0 0 100 Critical Gap Module: 6.9 Capacity Module: 817 320 Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* C LT - LTR - RT Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT 

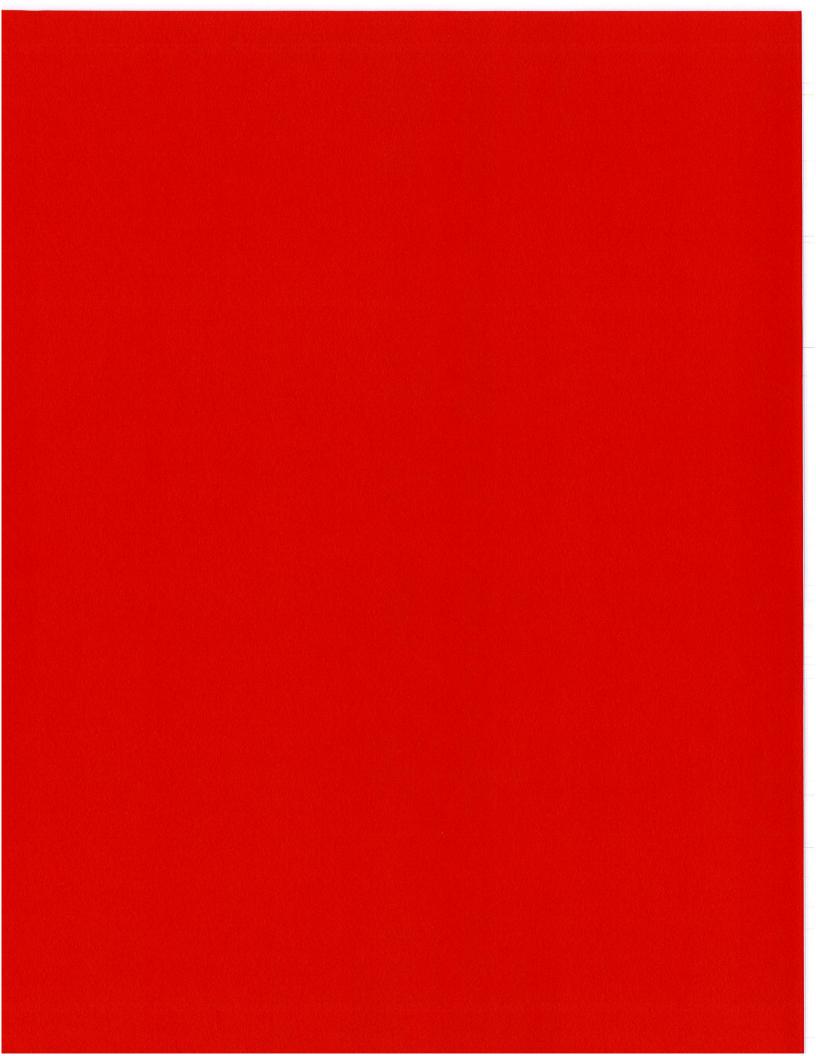
Note: Queue reported is the number of cars per lane. \*

\*

21.3

Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* ApproachDel: xxxxxx xxxxx xxxxxx

ApproachDel: xxxxxx ApproachLOS: \*



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2030 GPU

mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

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Scenario Report

Scenario: GPU KOLA PM

Command: Default Command
Volume: GPU KOLA PM
Geometry: existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

## 2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

Intersection Volume Report Base Volume Alternative

Node	Intersection	Northbo L T -		Southbo L T -			stbou - T -			stbou - T -	
6	SR 99 / Kola	110 1755	25	135 1410	335	305	135	50	20	140	65
-	SR 99 / Penni	105 1605	25	70 1455	320	490	110	90	90	180	110
	Pengtn Rd / L	45 245	40	120 165	260	115	110	25	25	125	60
	SR 99 / Elm S	265 1510	170	55 1655	10	10	75	205	175	80	55
	SR 99 / Arche	0 1840	10	0 2010	0	0	0	0	0	0	10
	SR 99 / Colem	15 1965	25	265 1635	145	165	340	15	10	340	145
	SR 99 / APRIC	0 1845	0	0 2010	0	0	0	0	0	0	0
26	SR 99 / ASH	0 1890	90	0 1990	0	0	0	0	0	0	90

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## 2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

#### Impact Analysis Report Level Of Service

Intersection	Base Del/ V/	Future Del/ V/	Change in
# 6 SR 99 / Kola Street	LOS Veh C E 69.5 1.059	LOS Veh C E 75.8 1.107	+ 6.299 D/V
# 12 SR 99 / Pennington Rd	E 62.8 1.053	E 72.3 1.079	+ 9.417 D/V
# 13 Pengtn Rd / Larkin Road	F 401.9 0.000	в 11.9 0.000	-389.957 D/
# 18 SR 99 / Elm Street	E 64.5 1.089	E 62.2 1.084	-2.351 D/V
# 19 SR 99 / Archer Ave	C 19.9 0.000	C 19.9 0.000	+ 0.000 D/V
# 20 SR 99 / Coleman Rd	E 74.2 1.160	E 74.2 1.160	+ 0.000 D/V
# 25 SR 99 / APRICOT	A 0.0 0.000	A 0.0 0.000	+ 0.000 D/V
# 26 SR 99 / ASH ST	D 31.9 0.000	D 31.9 0.000	+ 0.000 D/V

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #6 SR 99 / Kola Street \*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.059 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 180 Level Of Service: 69.5 Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - RL - T - R \_\_\_\_\_| \_\_\_\_\_|\_\_|\_\_| Volume Module: Base Vol: 110 1755 25 135 1410 335 305 135 50 20 140 Initial Bse: 110 1755 25 135 1410 335 305 135 50 20 140 65 PHF Volume: 116 1847 26 142 1484 353 321 142 53 21 147 \_\_\_\_\_|\_\_|\_\_| Saturation Flow Module: Adjustment: 0.90 0.90 0.90 0.90 0.88 0.88 0.93 0.94 0.94 0.93 0.93 0.93 Lanes: 1.00 1.97 0.03 1.00 1.62 0.38 1.00 0.73 0.27 1.00 0.68 0.32 Final Sat.: 1718 3382 48 1718 2696 641 1769 1304 483 1769 1211 562 -----| Capacity Analysis Module: Vol/Sat: 0.07 0.55 0.55 0.08 0.55 0.55 0.18 0.11 0.11 0.01 0.12 0.12 Crit Moves: \*\*\*\* \* \* \* \* \* \* \* \* Green/Cycle: 0.06 0.52 0.52 0.08 0.53 0.53 0.17 0.26 0.26 0.03 0.11 0.11 C D F F 5 E F C C 40 16 5 5 LOS by Move: F E E F E HCM2kAvgQ: 7 42 42 9 40 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) Intersection #12 SR 99 / Pennington Rd \*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.053 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): Optimal Cycle: 180 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: \_\_\_\_\_|\_\_\_|\_\_\_| 
 Control:
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Protected
 Include
 Include< -----| Volume Module: Base Vol: 105 1605 25 70 1455 320 490 110 90 90 180 Initial Bse: 105 1605 25 70 1455 320 490 110 90 90 180 110 PHF Volume: 111 1689 26 74 1532 337 516 116 95 95 189 116 -----| Saturation Flow Module: Lanes: 1.00 1.97 0.03 1.00 2.00 1.00 1.00 1.10 0.90 1.00 1.24 0.76 Final Sat.: 1718 3377 53 1718 3437 1537 1769 1815 1485 1769 2071 1265 \_\_\_\_\_| Capacity Analysis Module: Vol/Sat: 0.06 0.50 0.50 0.04 0.45 0.22 0.29 0.06 0.06 0.05 0.09 0.09 Crit Moves: \*\*\*\* \*\*\*\* \* \* \* \* Green/Cycle: 0.07 0.48 0.48 0.04 0.45 0.45 0.28 0.20 0.20 0.17 0.09 0.09 Volume/Cap: 0.99 1.05 1.05 1.05 0.99 0.49 1.05 0.32 0.32 0.32 1.05 1.05 Delay/Veh: 127.9 63.8 63.8 170.8 47.2 19.8 91.3 34.7 34.7 37.4 113 113.0 LOS by Move: F E E F D B F C C D F F HCM2kAvgQ: 7 39 39 5 32 8 24 3 3 3 9 9 HCM2kAvgQ: 7 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \* Intersection #13 Pengtn Rd / Larkin Road \* Average Delay (sec/veh): 199.4 Worst Case Level Of Service: F[401.9] \*\*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - F L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 \_\_\_\_\_| Volume Module: Base Vol: 45 245 40 120 165 260 115 110 25 25 125 Initial Bse: 45 245 40 120 165 260 115 110 25 25 125 60 PHF Volume: 47 258 42 126 174 274 121 116 26 26 132 63 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 47 258 42 126 174 274 121 116 26 26 132 63 -----|----|-----||------| Critical Gap Module: Capacity Module: Cnflict Vol: 811 618 129 737 600 163 195 xxxx xxxxx 142 xxxx xxxxx Potent Cap.: 298 405 921 334 415 882 1378 xxxx xxxxx 1441 xxxx xxxxx

Move Cap.: 120 360 921 124 369 882 1378 xxxx xxxxx 1441 xxxx xxxxx Volume/Cap: 0.40 0.72 0.05 1.02 0.47 0.31 0.09 xxxx xxxx 0.02 xxxx xxxx \_\_\_\_\_| Level Of Service Module: A \* \* LOS by Move: \* \* \* \* \* \* A \* \* Movement: LT - LTR - RT ApproachDel: 139.5 ApproachLOS: F F 

Note: Queue reported is the number of cars per lane.

\*

2030 GPU

# mitigated - Coleman Alternative

1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) Intersection #18 SR 99 / Elm Street \*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.089 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 64.5 Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \_\_\_\_\_|\_\_\_|\_\_\_| Volume Module: 10 75 205 175 80 Base Vol: 265 1510 170 55 1655 10 Initial Bse: 265 1510 170 55 1655 10 10 75 205 175 80 55 PHF Volume: 279 1589 179 58 1742 11 11 79 216 184 84 -----| Saturation Flow Module: Adjustment: 0.90 0.89 0.89 0.90 0.90 0.90 0.97 0.97 0.83 0.95 0.95 0.83 Lanes: 1.00 1.80 0.20 1.00 1.99 0.01 0.12 0.88 1.00 0.69 0.31 1.00 Final Sat.: 1718 3043 343 1718 3413 21 218 1633 1583 1236 565 1583 -----| Capacity Analysis Module: Vol/Sat: 0.16 0.52 0.52 0.03 0.51 0.51 0.05 0.05 0.14 0.15 0.15 0.04 \* \* \* \* Crit Moves: \*\*\*\* Green/Cycle: 0.15 0.58 0.58 0.04 0.47 0.47 0.13 0.13 0.13 0.14 0.14 0.14 D D F F F LOS by Move: F C C F E HCM2kAvgQ: 15 29 29 4 42 E D 3 15 15 12 42 3 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*

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1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #19 SR 99 / Archer Ave \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[ 19.9] \*\*\*\*\*\*\*\*\*\*\*\*\* Approach: North Bound South Bound East Bound West Bound  $\mathbf{L} - \mathbf{T} - \mathbf{R} \quad \mathbf{L} - \mathbf{T} - \mathbf{R} \quad \mathbf{L} - \mathbf{T} - \mathbf{R}$ -----|----|-----|------| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 1 1 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 1 Volume Module: Base Vol: 0 1840 10 0 2010 0 0 0 n Ω PHF Volume: 0 1937 11 0 2116 0 0 0 0 0 0 11 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1937 11 0 2116 0 0 0 0 0 0 11 Critical Gap Module: Capacity Module: \_\_\_\_\_| Level Of Service Module: LOS by Move: \* \* \* \* \* \* \* \* \* C Movement: LT - LTR - RT ApproachLOS: \* \_\_\_ Note: Oueue reported is the number of cars per lane. \*\*\*\*\*\*\*\*\*\*\*\*

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1690-10 LIVE OAK GPU \_\_\_\_\_ Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) \* Intersection #20 SR 99 / Coleman Rd \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Cycle (sec): 100 Critical Vol./Cap.(X): 1.160 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - F L - T - R 
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 --|------||-------||-------| Volume Module: 265 1635 145 165 340 15 10 340 Base Vol: 15 1965 25 Initial Bse: 15 1965 25 265 1635 145 165 340 15 10 340 145 PHF Adj: PHF Volume: 16 2068 26 279 1721 153 174 358 16 11 358 153 Saturation Flow Module: Capacity Analysis Module: Crit Moves: \*\*\*\* \*\*\*\* Green/Cycle: 0.01 0.53 0.54 0.14 0.65 0.74 0.08 0.20 0.20 0.01 0.13 0.13 Volume/Cap: 0.76 1.16 1.13 1.16 0.76 0.13 1.16 0.52 0.52 0.52 1.16 1.16 AdjDel/Veh: 143.8 102 91.0 151.0 13.6 3.9 168.7 36.2 36.2 70.2 138 137.9 LOS by Move: F F F F B HCM2kAvgQ: 2 55 53 17 20 A F D D E 1 11 6 6 1  $\mathbf{F}$ 1 16 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \* 2030 GPU

# mitigated - Coleman Alternative 1690-10 LIVE OAK GPU

\_\_\_\_\_ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #25 SR 99 / APRICOT \*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0] \* APRICOT Street Name: SR 99 Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R \_\_\_\_\_| Volume Module: 0 2010 0 0 Base Vol: 0 1845 0 0 0 0 Initial Bse: 0 1845 0 0 2010 0 0 0 0 0 0 PHF Volume: 0 1942 0 0 2116 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1942 0 0 2116 0 0 0 0 0 0 Ω 0 0 0 -----||-----| Critical Gap Module: -----| Capacity Module: Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx 4058 4058 2116 xxxx xxxx xxxxx Volume/Cap: -----| Level Of Service Module: Movement: LT - LTR - RT Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx xxxx xxxxx ApproachDel: xxxxxx xxxxx xxxxxx xxxxxx ApproachLOS: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Note: Queue reported is the number of cars per lane. \*\*\*\*

\_\_\_\_\_\_ 2030 GPU mitigated - Coleman Alternative 1690-10 LIVE OAK GPU Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) Intersection #26 SR 99 / ASH ST \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[ 31.9] \* Street Name: SR 99 ASH ST North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Approach: North Bound L - T - R -----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Lanes: 0 0 1 1 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 1 -----| Volume Module: 0 1990 0 0 90 0 0 1890 Base Vol: Initial Bse: 0 1890 90 0 1990 0 0 0 0 0 90 PHF Volume: 0 1989 95 0 2095 0 0 0 0 0 95 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 1989 95 0 2095 0 0 0 0 0 Critical Gap Module: \_\_\_\_\_| Capacity Module: \_\_\_\_\_|-----||------||------||------| Level Of Service Module: 1.9 LOS by Move: \* \* \* \* \* \* \* \* \* \* Movement: LT - LTR - RT D ApproachLOS: \*

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Note: Queue reported is the number of cars per lane.