

Sustainability Assessments: Campus Transportation Policies, Practices and Facilities

Todd Burciaga and Kristin Michael, Calvin College
Geography 351-A: Introduction to Urban and Regional Planning
Department of Geology, Geography, and Environmental Studies
Prof. Thomas Tilma

Problem

According to the Surface Transportation Policy Project, Grand Rapids is one of the country's most dangerous areas for pedestrians¹. However, Calvin College and the City of Grand Rapids are currently taking strides toward better planning for safe, sustainable and accessible transportation. Calvin's Geography 351 class has analyzed and prepared various suggestions to aid the city and Calvin College in conscientiously planning our community so all who travel to and from Calvin's campus may do so safely, healthily, and happily.

Propositions

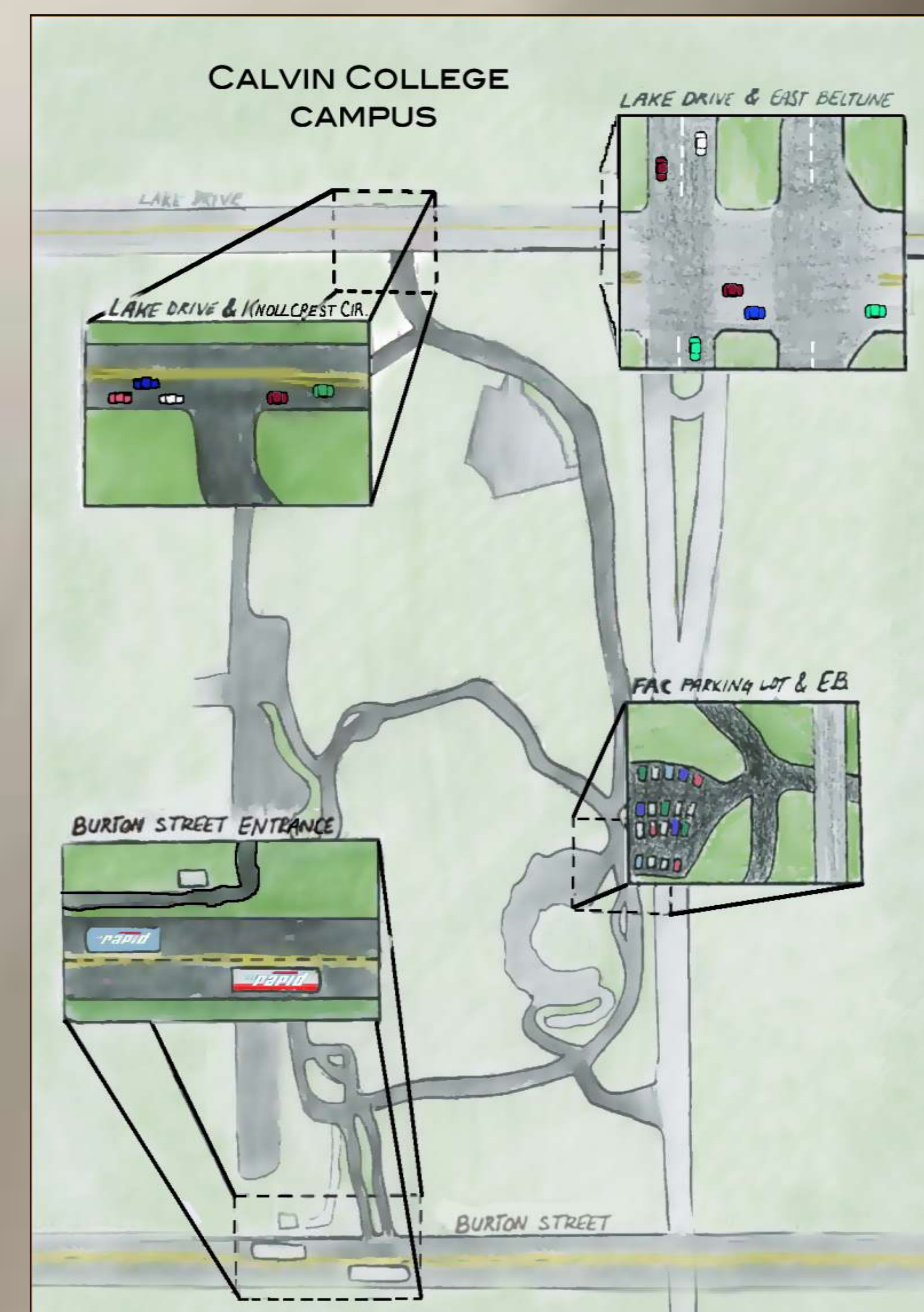
The Geography 351 class developed the following sustainability assessments and propositions for Calvin's support and implementation:

1. Support a shift toward sustainable transportation policies, practices, and facilities according to basic cost-benefit analyses that include external costs and benefits.
2. Increase student parking fees to encourage and subsidize student Rapid ridership.
3. Support implementation of the Rapid's GT2 project and extend continuous bus service from Calvin to the Amtrak station downtown as well as to the Gerald R. Ford International Airport.
4. Implement previously adopted public bicycle facility improvements .
5. Improve lane markings and safe traffic flows both on Calvin's campus and in Calvin's connections to the community.
6. Install pedestrian walking path from Calvin's northbound East Beltline entrance along the edge of the nature preserve, passing under Lake Drive and continuing north.
7. Re-evaluate and improve accessibility practices along Burton St. and campus at large.

Supporting arguments

Geography 351's current proposals utilize the techniques of America's best planned cities as well as cutting-edge planning innovations used in many cities throughout the world. For example, automobile disincentives such as raising student parking prices have been successful in the larger communities of Boston, Portland and Boulder². Additionally, the Bus Rapid Transit systems recommended by Team 4 are relatively new innovations, currently being used in various places such as Boston, Ho Chi Minh City, Vietnam, and Rouen, France².

Current Campus Status and Proposed Changes



CURRENT CAMPUS CONDITION	
LAKE DRIVE & KNOLLCREST CIRCLE <ul style="list-style-type: none">- No crosswalk- No sidewalk- No bike lane- Ambiguous lane markings	BURTON STREET ENTRANCE <ul style="list-style-type: none">- Non-ADA compliant bus shelter- Non-ADA compliant path- Limited <i>Rapid</i> routes
LAKE DRIVE & EAST BELTLINE <ul style="list-style-type: none">- No sidewalk- No crosswalk- Curbs allowing for high speeds	FAC PARKING LOT & EAST BELTLINE <ul style="list-style-type: none">- Confusing traffic junction- Over-crowded parking lot- No bike lanes- No crosswalk

RECOMMENDED IMPROVEMENTS TO CAMPUS CONDITION

LAKE DRIVE & KNOLLCREST CIRCLE <ul style="list-style-type: none">- CROSSWALK FROM KNOLLCREST CIRCLE ACROSS LAKE DRIVE- CONTINUATION OF CALVIN PATH WEST ALONG LAKE DRIVE- TREE BARRIER BETWEEN PATH AND STREET- NARROW LAKE DRIVE AUTO LANES TO INSTALL MULTHUSE LANES- CLEARLY MARK EACH NEW LANE DESIGNATION	BURTON STREET ENTRANCE <ul style="list-style-type: none">- WIDEN BUS SHELTER ENTRANCE AND EXPAND ENTIRE SHELTER- DECREASE GRADE OF PATH TO IMPROVE ACCESSIBILITY- UPDATE PATH TO SELF-MAINTAIN (I.E. SNOW REMOVAL HEATING)- EXTEND <i>RAPID</i> ROUTES' SERVICE TO CONTINUE DIRECTLY TO AIRPORT AND TO AMTRAK STATION FROM CALVIN
LAKE DRIVE & EAST BELTLINE <ul style="list-style-type: none">- DESIGNATE PATH BENEATH EAST BELTLINE UNDERPASS AS SAFE PEDESTRIAN CROSSING- CREATE UNDERPASS BENEATH LAKE DRIVE ON THE EAST SIDE OF E.B.- EXTEND PATH NORTH ON E.B., ALONG OUTER EDGE OF NATURE PRESERVE AND CONTINUING NORTH ON E.B.	FAC PARKING LOT & EAST BELTLINE <ul style="list-style-type: none">- CREATE MULTHUSE LANES ALONG CALVIN STREETS- UTILIZE COLORED ASPHALT TO DESIGNATE LANES- INCREASE STUDENT PARKING FEES TO SUBSIDIZE STUDENT <i>RAPID</i> RIDERSHIP

Conclusions

The following propositions encourage Calvin College to persevere in its commitments to sustainability and access. If Calvin truly strives to be an active agent of renewal in this community, it must not only participate in the promotion of sustainable development but rather be on the forefront of innovation in sustainable campus transportation policies, practices and facilities.

References

¹ "Mean Streets 2004." [STPP Library](http://www.transact.org/library/reports_html/ms2004/exec_sum.asp). 2004. Surface Transportation Policy Partnership. 27 Nov. 2006 <http://www.transact.org/library/reports_html/ms2004/exec_sum.asp>.

² "Model Cities: USA" [Institute for Sustainability and Technology Policy](http://www.sustainability.murdoch.edu.au/casestudies/Case_Studies_Asia/us/us.htm). 2000. Peter Newman. 27 Nov. 2006 <http://www.sustainability.murdoch.edu.au/casestudies/Case_Studies_Asia/us/us.htm>