FORWARD DIRECTIONS
Proposals for Advanced Sustainability for California State University East Bay

Sherman Lewis, Professor Emeritus
Emeriti Rep, Academic Senate
Sherman.lewis@CSUeastbay.edu
December 2022

Contents

 ADMINISTRATIVE STRUCTURE .................................................................................................................. 2
  1. University Sustainability Officer ........................................................................................................... 2
  2. Campus Sustainability Committee ...................................................................................................... 2
  3. Endowed Professorship in Advanced Sustainability .......................................................................... 2
  4. Faculty Committee to Support the Professorship ............................................................................... 3
  5. Operational improvements needed .................................................................................................... 3
  6. Placeholder ......................................................................................................................................... 4

 RESEARCH .................................................................................................................................................. 4
  7. Modeling growth without growth ......................................................................................................... 4
  8. Annual academic meeting on advanced sustainability research ......................................................... 4
  9. Our First 800 Years of Thinking ......................................................................................................... 4
 10. The Crisis of the Anthropocene ......................................................................................................... 4
 11. Measuring America: International Comparisons ............................................................................... 5
 12. Challenges to American Democracy .................................................................................................. 5
 13. Reforming the analysis of Cal State East Bay GHG for transportation ................................................. 5
 14. Research on causes of science culture/dogmatism and empathy-chauvinism ...................................... 6
 15. The Mismeasurement of Mobility in Walkable Neighborhood Systems ........................................... 6
 16. Transportation Pricing Research ......................................................................................................... 7
 17. Research on a Failed State .................................................................................................................. 7
 18. The Historical Archive of the maps of the Great American Road trip, 1900-2020 ......................... 9
 19. Advanced technology wood energy ................................................................................................... 9

 FACILITIES AND MASTER PLAN ........................................................................................................... 9
 20. Beeline Bus ........................................................................................................................................ 9
 21. College Heights ............................................................................................................................... 10
 22. Pioneer Way .................................................................................................................................... 11
 23. Child Care Center ............................................................................................................................ 11
 24. Walk access to campus ...................................................................................................................... 11
 25. Campus Master Plan and access planning ......................................................................................... 12
 26. South campus recreational area clean up ......................................................................................... 13
TEACHING ........................................................................................................................................ 14

27. Live polling by students in the classroom ................................................................................. 14
28. Citizen Education .......................................................................................................................... 16
29. The “I Give” website .................................................................................................................... 16
30. Sustainability videos in the classroom .......................................................................................... 16
31. Teaching About Sustainable Mobility in Cities ........................................................................... 17

PROMOTE SUSTAINABILITY IN OUR COMMUNITIES ................................................................. 17

32. Plan Bay Area ............................................................................................................................... 17
33. The real Bay Area regional economic product ........................................................................... 18
34. Hayward Planning Issues ........................................................................................................... 18

In Word, turn on Navigation, Headings, to be able to see the outline and click to any idea.

ADMINISTRATIVE STRUCTURE

1. **University Sustainability Officer**

   The importance of Sustainability has not been recognized in Future Directions, as discussed in the overview.

   The position of University Sustainability Officer (USO) would replace the position and define the duties of the Director of Sustainability, creating a position comparable to the UDO, with the ability to work across the many offices and departments of the University. Like the UDO, the USO would not have a large staff. The USO would staff the Campus Sustainability Committee and the Faculty Committee on Sustainability.

   The creation of the USO would recognize that Sustainability is equal in importance to Diversity. The USO position would recognize that Diversity is one of the three major goals of Sustainability and, the achievement of Diversity depends on achieving Sustainability.

   The USO would help manage the significant expansion of Sustainability, called Advanced Sustainability, as defined in many of the proposals presented here.

   The job description for the current position of Director of Sustainability can be more effectively carried out by elevating the position to a USO. The recent establishment of a separate office of Energy & Utilities Management would have responsibility for the energy and utility programs. Similarly, Facilities Management can do sustainability relating to landscaping and buildings.

2. **Campus Sustainability Committee**

   Expand the work of the Campus Sustainability Committee to include advanced sustainability. Stop excluding admin, faculty, students, and emeriti who want to serve. Give oversight assignments to subcommittees, which would do most of the work. Work on all aspects of advanced sustainability, not just campus operations and curriculum.

3. **Endowed Professorship in Advanced Sustainability**

   The President would appoint an ad hoc temporary committee to research the salary and amount of funds needed to support it. University Advancement would raise the 2.5 million for a
$100,000 annual starting salary needed. This idea is linked to what the prof would do, explained below.

4. Faculty Committee to Support the Professorship

The Faculty Committee on Sustainability would define work of the professor (described in terms of the economic modeling research described below). The Committee would recruit—not just advertise—for top ABDs and mid-careers with research track records. The committee would confer with senior UC Berkeley and Stanford profs about candidates and how to write the job description in a way that will attract top talent, to get candidates to realize the importance of the work in spite being at a second tier institution. Admin and faculty should think bigger.

5. Operational improvements needed

Update the Directory and create system of maintenance: For example, the https://lwa1.csueastbay.edu/staffdir/ for “political science” has dead people and those who are no longer with us and does not list the Chair or the Administrative Support Coordinator. (The culture wastes time with overly long titles, for example, for Secretary. Georgina Lear is a very competent secretary for two departments and does not have time to update the Directory. It should not be her responsibility. The Directory fails to indicate professors on sabbatical and who are probably not available. The departmental website by contrast has an excellent pdf on office hours, class schedules, offices, phone numbers—everything up to date in one place—it really works well.

**Handshake** does not work. I tried to use it and despite much persistence I could not post a job listing and I could not get any one to return my calls even after several left messages. My emails explaining my problems went unanswered. You can test the system by, for example, having a naïve user try to list a job for a student to work part time on a weekend day to do yard work and housework for an elderly couple living within walking distance of campus at $20 per hour.

**Email black holes.** The way email works now, a sender has no way of knowing if an email reached the target inbox or if it was opened unless the recipient answers. The system needs a way of pinging back to the sender if the email reached the inbox or not, for example, if the spam blocker prevented delivery. Similarly, it would help to know if the recipient had opened the email. This would work automatically, without requiring action by the recipient. Most of my email is not answered and I never know why? Did it get there? Was it opened? Was there no reply because I am too obnoxious or unimportant to deal with? Email can easily demand too much time, but senders deserve to know that the lack of an answer is due to recipient business, not sender’s bad breath. Of course, the problem were bad breath, the sender should now about it.

**Backup.** In some cases a message needs to get through for operational reasons. There should be some way for an email to reach a backup recipient when the issue is not specific to the intended recipient but relevant for operations. A related recent example is the need to get the police to always pick up the phone for locked rooms.

**Wayfinding.** Wayfinding starts when a naïve person gets off an elevator and tries to find a room. For example, on SF third floor, the elevator door opens to a huge blank grey wall with no information. One looks around; the short hall to the left has an almost visible number. To the
right is a T intersection going left and right. Now try to find the Academic Senate office in less than 3 minutes. It’s a 30 second walk. Fourth floor, try finding Philosophy. The signage is better, but should be lower and we need a big sign pointing the right direction for all rooms, as there is a large number off to the right. It’s easy to find the room number, 442, with a big sign on the door, HISTORY DEPARTMENT. Knock on door, Donilon answers. This is the Philosophy Department, he says. We could do better.

6. Placeholder

RESEARCH

7. Modeling growth without growth

Conventional economics ignores too much of the whole economy, which includes values that lack a money price tag. An econometric model that quantifies such value for "growth without growth" could provide better guidance for policy alternatives. The Professor of Advanced Sustainability would model alternative futures based on the whole economy. This is a large and growing field that links sustainability goals to quantitative economic analysis to support objective policy making. No field of research is less recognized and more important.

I can’t in a few words explain well why this research is so important. It is the best way to develop sensible policy that reflects the market freedom of a mixed economy, which understands property as one of a few central pillars of freedom and democracy; that preserves choice; that guides policy by elasticities based on internalizing externalities into prices, and drives the economy toward sustainability with minimal disruption. Enough tariff on Canadian oil sands keeps them in the ground and we get the watts from the sun.

See Modeling Growth without growth.docx and Gottlieb Growth without Growth.pdf.

8. Annual academic meeting on advanced sustainability research

The Professor of Advanced Sustainability would organize an on-campus academic meeting once a year on advanced sustainability research, with academic papers and leading researchers. The meeting could reasonably take place two years from the appointment of the professor.

9. Our First 800 Years of Thinking

My essay, “Our First 800 Years of Thinking,” would be used in the curriculum and posted on the Cal State East Bay website for public education about sustainability. It concerns the growth over the last 400 years of science culture vs. dogmatism and empathy vs. chauvinism. It considers the relationship of the brain to the mind. It speculates about the evolution of human culture 400 years into the future concerning mind-brain research, the evolution of culture, and the socialization of the young child. A faculty committee would further develop the essay annually. It would be 50-100 pages long. See Three Essays in Search of a Conversation.

10. The Crisis of the Anthropocene

Global warming is only one component of a far larger ecological crisis of vast scope and complexity. A faculty committee would research, update, and maintain a report of 50-100 pages on the “Crisis of the Anthropocene,” a summary of all aspects, citing best literature, of human impacts on the environment. It would be updated twice per year and posted on the Cal State East Bay website for public education about sustainability. The report would be used for teaching. There is no such report on the web today. See Three Essays in Search of a Conversation.
11. Measuring America: International Comparisons

The Hayward Area Planning Association created and has maintained the International Comparisons website, https://internationalcomparisons.org/, for the purpose of educating Americans about how far behind we are in relation to countries which actually are advanced and democratic. internationalcomparisons.org has more kinds of indicator statistics than any other site on the web. The major advanced democracies we chose to study are Germany, France, Britain, Italy, Sweden, Norway, Denmark, the Netherlands, Canada, Australia, and Japan. The statistics show their generally superior performance compared to the United States. The work has been done by Lisa Thompson, Mariela Pena, Elizabeth Zapata, Julia Norton (emerita, Cal State East Bay), and myself. Cal State East Bay would sponsor and maintain into the future the International Comparisons website because the Hayward Area Planning Association is probably coming to an end.

12. Challenges to American Democracy

I wrote an essay, “Musings on our Present Discontent,” which is an objective discussion of the most important controversies of our times and my views on those issues. The Musings essay summarizes statistics from International Comparisons comparing US performance with Western Europe to show that the US has fallen behind on most major measures of performance and is not a democracy.

For the classroom, the essay would need to add alternative views. It would certainly be "innovative teaching" to have a Political Science senior seminar develop the essay. It would be 50-100 pages on major controversies, with a section on agreed description followed by alternative views on policy.

The essay would be updated once per year and posted on the Cal State East Bay website for public education about sustainability. The site would accept, within limits, outside comment for use in updating the essay each year. It would not allow advocacy of racism, sexism, other forms of discrimination, violence, propaganda, misinformation and lies. It would be vetted by advocates of the opposing positions to reflect their views fairly and by faculty. See Three Essays in Search of a Conversation.

13. Reforming the analysis of Cal State East Bay GHG for transportation

The estimate of campus GHG emissions uses a method of the Cal State system which is not integrated with the state system and mismeasures GHG. See Climate Action Plan 2018.

The state uses emissions inventories (EMFACs), transportation network computer models, air shed models. The EMFACs report the average amount of pollution by mile for the fleet on the road in a given year.

The state agencies include the California Air Resources Board (CARB), the Cap-and-Trade Program (AB 32), AQMDs, CMAs, and local government. Reform would allow more accuracy and coordination with mainstream indicators.

Also the best way to measure campus emissions is to use the trip table of the Metropolitan Transportation Commission computer model which has all trips from and to about 1,024 travel analysis zones (TAZ). This table is used by the Alameda County Transportation Commission, in which Cal State East Bay is TAZ 187. The table shows all trips going to and from the campus. Vehicle mileage should be assigned half to the external TAZ and half to the campus TAZ. The amount of pollution would be derived from the air shed model and the EMFACs. -end ERFA.
14. Research on causes of science culture/dogmatism and empathy-chauvinism

Research on causes of science culture/dogmatism and empathy/chauvinism. Dogmatism and chauvinism take many forms, such as nationalistic extremism (Trumpism, Putinism, Israeli suppression of Palestinians, Hindu suppression of Muslims, Chinese suppression of Tibetans and Uyghurs), religious extremism (Islamicists, right-wing fundamentalists), and ethnic conflict (the Janjaweed in Darfur, Sudan). Different labels obscure common causes.

For a few years now, I have been looking for, and not finding, adequate research on this issue, yet it is one of the most important facing the world today. This research is discussed in "Our First 800 years" starting at “My notion is that...”

The Psychology Department could do more research on the causes of, and how to increase, science culture and empathy.

The research will be difficult. We will need operational definitions of when behavior crosses the line into chauvinism, with its dehumanization of others and justification of violence. We will need to study the causes of empathy as well. There are many possible causes: heredity, socialization, continuing influences from outside, and our own thinking. The causes are likely to be long-term, based in socialization of the child. They are likely to be extensive and cultural, involving the environment that surrounds and influences us to become chauvinistic, over a period of time. There may be some genetic predisposition, which seems unlikely but should not be ruled out.

15. The Mismeasurement of Mobility in Walkable Neighborhood Systems

The National Highway Transportation Survey and similar surveys do not measure trip making in terms of home round trips considering walking distance. As result, we do not have basic information about Walkable Neighborhood Systems (WNS). See academic article, Mismeasurement...

WNS are a major and largely overlooked solution to achieve sustainability. WNS are defined by walking distance within residential neighborhoods and by the populations of the walking area to establish its density over area. Densities over 30 persons per neighborhood acre are of interest, but achieving 60% or more of trips by sustainable modes seems to require densities over 50 persons per neighborhood acre.

WNS already exist in central areas of older, large cities and have complementary features. Developing more WNS requires managing the external costs of autos. WNS have low living costs defined as a combination of housing, energy, and transportation costs. WNS have social cohesion and low crime. WNS can develop in old centers and corridors.

My paper analyzing the California Household Survey established the overarching importance of density alone as an explanation for a high percent of sustainable modes. Previous research failed to look at densities above 50 persons per neighborhood acre and grossly underestimated the role of density in reducing dependency on cars.

My paper on WNS defined a new field of urban studies, Walkable Neighborhood Systems, which discussed the many ways in which density over area in walking distance contributes to walking, bicycling, transit, health, the ability to live without owning a car, and peace and quiet.

My coauthors and I used extensive census data, maps, and ArcMap to delineate neighborhoods based on walking distances in San Francisco. We found a high correlation
between density and sustainable modes, food sources, and walkability. We did the same research in Boston with similar results.

We examined the National Household Transportation Survey, California Household Transportation Survey, The Bay Area Transportation Survey, and The American Time Use Survey, all of which are good databases on travel purpose and travel time. To our surprise, none of these surveys covered home round trips, which are most trips. We found travel time provided a more nuanced approach to travel trip purposes than the categories that were used. Many trips did not actually have an end use activity at the destination; we called them "not trip trips." We are working with Cal State East Bay and with Westat, a sophisticated survey firm able to use cell phones for trip data, to get funding for a pilot survey.

WNS research is essential for controlling the adverse impacts of automobiles and for improving neighborhoods. The campus could easily become a leader in this field because few others are paying attention. The results can be used to promote the development of sustainable and affordable housing in neighborhoods in old centers and along strip commercial corridors including downtown Hayward and Mission Boulevard.

One of my top three priorities in 2023 will be applying to the NSF for a research grant.

16. Transportation Pricing Research

The need for transportation pricing research is explained in my book, *The Rise and Fall of Hayward’s Route 238 Bypass*, chapters 6 and 7. The issues include unbundling, modern parking charges (the high cost of free parking), parking underneath, parking structures, and subsidies for parking in the state Tax Credit Allocation Committee, the Strategic Growth Council’s Affordable Housing and Sustainable Communities program, and Department of Housing and Community Development. The issues include zoning, employee cash out, carbon tax (Carbon Tax Center), gas tax v. sales tax, congestion charges, impaired driving, and pedestrian externalities. They include the four ways to charge for parking: economic cost, economic plus external costs, market rate, and green scamming. Cal State East Bay should study how its policies now subsidize traffic, GHG, and other problems and how it could develop cost-effective access to the campus using a rapid shuttle on its own or in cooperation with College Heights development. Parking fees and fines could support the service.

17. Research on a Failed State

The evolution of the nation state over the last 300 years limits the international ability to intervene in failed states. However, the international community itself lacks capacity to intervene effectively, leaving weak states vulnerable to outside military intervention by countries like the United States in Afghanistan and Russia in Syria and Ukraine.

Failed states in general are a major problem well beyond the ability of Cal State East Bay to do much about. Civil and political conflict, fiscal mismanagement, drought caused by climate change, crop failures, drug cartels, political corruption, abuse of workers and the environment by corporations, gender violence, and overpopulation destabilize governments and cause push emigration, creating problems in the receiving countries.

The United States, itself, contributes to failed states in Latin America by its own failure to control illegal drugs and guns. US demand for drugs from, and supply of arms to, the south are part of the problem. Coca eradication has been one of the most failed policies of all time. Many Americans are upset by immigration, even building walls to keep people out, which also fails.
We can look to successful countries to understand how failed states might improve. Hans Rosling convincingly demonstrates the success of billions of people prospering in place over the last 50 years. See his TED talks at https://www.ted.com/talks/hans_rosling_the_best_stats_you_ve_ever_seen?language=en

Cal State East Bay, in a small way, can help. We can support research in one small area where we are likely to have students in our classrooms. Cal State East Bay should establish a long-term research relationship with a sister university. We could already have, or recruit, a professor from the area. We could study our enrollment to see where the most relevant students were coming from.

Many of our students have connections to these problems, and may see a future of service. They could build relationships back to countries of origin, as we have seen with many foreign students staying here but working with businesses back home and many returning there voluntarily for opportunities in their own culture. Elite colleges should not be the only ones qualifying people for the US Diplomatic Service.

A small state in Mexico or a country in Central America would be more manageable than a big one for research on the problems and on policies to help the local people. Less violence, corruption, and crime and more health, education, and opportunity would allow them to prosper-in-place rather than emigrate, solving a major problem for them and a minor problem for the US. A few small Mexican states are failing to control drug cartels and have political corruption, yet also have reform efforts from civil society. Cal State East Bay would provide some academic talent and work with other institutions, NGOs, and civil society. Similarly, Honduras now has the new government of Xiomara Castro replacing a corrupt regime that had murdered peasant environmental activists and had been supported by US foreign policy.

There is more to geography than the future. There is the history of the explosion of geography knowledge in America from rail in the 1860s to national park tourism by rail to the upper class on bad roads in the 1910s to the farmer’s tent circle off the new US highway to the golden age of postwar automobility and the family trip and backpacking into the wilderness, and the printed map was at the heart of it, the geography of it.

18. THE HISTORICAL ARCHIVE OF THE MAPS OF THE GREAT AMERICAN ROAD TRIP, 1900-2020

During World War I, Dr. Frederick Murray, his wife Jeanette (mother of Year 19xx, first elected woman member of the Cedar Rapids School Board, and author a book on the history of the city), and their five children drove from Cedar Rapids to San Francisco on their way to Hawaii. They stayed in tents and visited Yellowstone, photos of bears available.

There is the history of the explosion of geography knowledge in America from rail in the 1860s to national park tourism by rail to the upper class on bad roads in the 1910s to the farmer’s tent circle off the new US highway to the golden age of postwar automobility and the family trip and backpacking into the wilderness, and the printed map was at the heart of it, the geography of it.

The CSUEB Geography Department has a derelict map room with paper maps that are anachronistic for professional geographers. The social history of American popular knowledge of geography is in danger of being lost, just like reading real books in the stacks. The collection
doesn’t cost us anything other than taking up space. It is waiting for an inspired student to start their Ph.D. research on the role of the paper map in the explosion of popular knowledge of geography that came with dramatic increases in the speed, and decreases in the cost, of personal travel. People could actually travel at 20 miles per hour if it didn’t rain. $1,000 is available to get started by hiring a student to look into how to remove non-map clutter out and organize the maps into major categories. Filing cabinets are available if needed.

19. Advanced technology wood energy

Research whole energy systems burning wood and clean waste in small bins using fans to blow air blown up from below. The air agitates, or fluidizes, ceramic balls to promote fast, complete combustion with little pollution. The bottom of the bin has a grate to hold the balls and wood. Electrostatic precipitators remove particulates. Neighborhood-based whole energy systems feature electrical generation, water heating, local heat and electrical distribution, low emissions, and cost-effectiveness.

Wood energy has been ignored because of the air pollution it produces. Little attention has been paid to how much pollution remains after electrostatic precipitation of particulates and how those pollutants could be controlled. Solid waste burning plants in other countries do a good job controlling air pollution from their incinerators and are able to generate heat and electricity at low cost.

Advanced wood burning could produce very little pollution, help reduce global warming, use a virtually free source of energy, and contribute to the economy. The Bay Area has abundant eucalyptus trees which are an invasive species, a safety hazard, and a fire hazard. I have spent thousands of dollars controlling these trees on my property and I still have many tons of useless trees.

The Cal State East Bay Engineering Department could research the cost-effectiveness and pollution of fluidized bins systems compared to existing systems and to burning fossil fuels. The research would use one fluidized bed for testing. The researchers would confer with tree cutters about optimal firewood sizes for chain sawing.

FACILITIES AND MASTER PLAN

20. Beeline Bus

Study fast, frequent and free transit between the campus and Hayward BART using advanced technology buses, right-lane queue jumping, and traffic light preemption. The route would be as direct as possible, from C Street to Mission to Carlos Bee to a bus-only lane on Palisade Street serving College Heights, and ending at the opening between the Music Building and Robinson Hall. The return would use left on Fletcher continuing on Watkins to B St. to BART.

The system requires medium-sized 30-foot buses powerful enough to climb the hill at 45 mph and small enough to be nimble in traffic. Europe has such buses, electric and dual diesel-electric buses with regenerative braking going downhill.

The system uses low floor buses that dock level with raised sidewalk bus stops to achieve no-step boarding. The system uses proof of purchase fare enforcement so that there is no fare collection, people board the bus faster, and the bus driver only drives the bus.

The system takes eight minutes from campus to Hayward BART and is faster than driving, pulls people out of their cars, and thus achieves high ridership.
The campus would run this service using resources now spent on the campus shuttle. The CSU system has the institutional framework and support for operating cost. To be fast enough, the buses are more expensive than what American culture understands, but can still be financed under the Education Code. Much of the problem is American culture which sees transit as a slow service for the needy that other people ride instead of a fast service that everyone wants to ride.

I have been proposing this service for many years and have spreadsheets analyzing how it would work. Some of the spreadsheets are hard to understand and I would like to walk someone through them if the campus decides to take transit seriously. AC Transit is not set up to be able to meet the need. Fortunately, the Beeline Bus can provide a service fast enough to meet Travel Time Budgets, that is, be faster than the automobile.

The service would be coordinated with a similar service on the same route financed by the College Heights development. The campus-run system would use class pass; the College Heights system would use eco-pass. The combined services would have buses every five minutes. A similar system could support a fifth bus from development along Mission Boulevard, providing service every four minutes.

If this system becomes successful, it can be expanded and similar service can be developed from the other major routes to campus. See bus spreadsheets at Village Bus Proforma.

The Campus Master Plan by order of the California Supreme Court must mitigate its traffic impacts from new buildings, which has been interpreted so far as requiring expansion of intersections for car traffic. All the increase in traffic could instead be served by the Beeline Bus, saving money, improving traffic flow, and with less GHG.

One of my top three priorities in 2023 will be advocating the Beeline Bus.

21. College Heights

Involve campus-admin, faculty, staff, students, in the development of an affordable and sustainable community on the old Overlook Avenue quarry near campus. We have a unique opportunity that will come this way but once, this year and next, for a community serving campus. The alternative is just another rental apartment complex like City View.

The development process could be used for teaching and support the Real Estate and Engineering programs: design, real estate financing, market research, marketing, real estate management, sustainable and affordable building technologies, sustainable transportation. This opportunity will end with entitlement by the City. The campus would work with the city, the Hayward Area Planning Association (HAPA, a 501c3 since 1977), and the developer. Students would interact with local citizens, the city of Hayward, and the developer. Market Research would consult faculty and staff and students using email surveys, trip logs; debrief using logs and focus groups.

The current draft site plan has 750 units. Access would be from Carlos Bee across the PG&E corridor to Palisade to Overlook and back to Carlos Bee. It would connect the campus through the project to Hayward BART. There would be a Village Center next to the bus stops and walkways going into the residential area. There would be a community center with a café, HOA offices, a fitness center, and a meeting room. There would be a major recreational path, the Foothill Trail, connecting the project north to Ward Creek park and south to south Hayward.
BART. There would be reduced parking and parking would be charged through unbundling and modern metering. Car traffic would be completely separated from the walkways.

The HAPA brochure on College Heights summarizes the major concepts. The HAPA folder on College Heights has 52 folders, 880 files, and 1.22 GBs. This project is related to the Bee Line Bus, to reforming the Campus Master Plan to remove anti-sustainability parking structures, and to allow important projects to be built without expensive street improvements.

At this time, a developer is very interested in these concepts. The City of Hayward has spent four years pursuing a project and it has stalled. The campus could help persuade the city to give the developer the letter of intent he needs to develop a proposal.

This project has been a major commitment of mine since the 1980s and I will continue to work on it. I hope to find one person connected with Cal State East Bay who will be excited by the opportunity to create a campus community and will work with me to make it a reality. See the HAPA website page on College Heights at College Heights.docx.

One of my top three priorities for 2023 will be advocating College Heights with help from two young associates paid through HAPA.

22. Pioneer Way

The campus Master Plan includes Pioneer Way, an access road off Hayward Boulevard opposite Parkside Drive. It is an inexpensive project, still not implemented, which causes congestion at Carlos Bee Boulevard and Hayward Blvd.

23. Child Care Center

Build a childcare center on campus, an excellent location being west of Robinson Hall in the parking lot there. The childcare center would serve student parents, educate child development professionals, teach about child development, and do research. The Department of Human Development would play a major role in managing the center. It would be modeled on historic research at Yale University and on Head Start.

As a matter of social equity, the campus needs to end discrimination against parents who cannot now enroll by providing an essential service. If we are serious about serving low-income students, we should understand more deeply the burden placed, in most cases, on the moms.

A childcare center would enrich campus life with the presence of children. Campus life tends to isolate us from children and old folks. A childcare center could provide a reminder of real life and, at least for me, a chance to be inspired by little kids. Also, I would like to contribute books and toys, hopefully not too old to be useful.

The childcare center also can play a role in research on socialization for science culture and empathy. It would try to figure out why one little kid bashes another on the head. There are reasons why most of what we need to know we learn in kindergarten.

24. Walk access to campus

Support city approval of a public path to the Old Highlands neighborhood serving the campus. The path would allow the Home/Hillcrest neighborhood to walk to campus using a shortcut away from traffic. I used this path for about 35 years before a developer wanted to close it off for housing. I went to court at great expense and procured a private easement only three feet wide from Hillcrest down to Hayward Boulevard. The property next north could accommodate another three feet if required by the City, at which time my private easement would combine with it under the terms of the easement.
The developer has failed to comply with the requirements of the easement and I am trying to find time to get legal help.

This area was part of the county and was subdivided in 1914 as the Hayward Home Farm Tract; it had half-acre and acre parcels where many people had rural homes on dirt roads and had goats and chickens, and the area was known as “goat hill.” In 1969, in order to get the campus located in Hayward in competition with Pleasanton, the City created the Campus Community Plan and annexed the land into the City.

Also as part of the deal, the City carried out Hayward Hills Assessment District I to provide water and sewers. A Second Assessment District to improve the streets was too expensive and too big (56 foot suburban streets for a hilly neighborhood needing 20 feet of width). We defeated it in court.

The old dirt walking path probably goes way back to 1914. It shows up on the oldest aerial photographs available from a company next to the Oakland commercial airport associated with Amelia Earhart. For me; it was a great little path except when the rain made the dirt slippery. It’s the kind of path that would be honored in a country that cared about walking.

25. Campus Master Plan and access planning.

Work with the City to avoid expanding highways and to renegotiate the legal settlement based on intersection performance analysis showing reduced congestion using fast, frequent, free, modern, rapid buses. Pay attention to modern transit technology, travel time budgets, and elasticities. Revise the Campus Master Plan.

Background: The current Master Plan is egregiously anti-environmental, evidently due to fossil fuel thinking by Cal State Long Beach transportation planners. It calls for five subsidized parking structures, has no Transportation Demand Management, and ignores what is necessary to make transit work. Before it was approved, HAPA and the City sued the CSU. The case went to the California Supreme Court where the City won a statewide precedent enforcing mitigation requirements in CEQA. The City forced the CSU to pay for enlarging intersection that would be congested by traffic from expansion. Unfortunately, the legal settlement requires expensive projects which are anti-environmental, expensive, and hinder new student housing on campus.

HAPA lost on the Meiklejohn parking structure and won on a secondary issue, use of public parks. The Appellate Court clearly did not understand our case and the California Supreme Court denied us our day in court. Fortunately, the legal delay took so long that the campus lost the funding for the structure, a major victory for the environment.

The Master Plan still calls for five parking structures that are unnecessary, very expensive, subsidized, increase greenhouse gases, and make access to the campus slower.

I emailed the admin and faculty links to videos on city planning and advances in Europe that show how far behind the US is because of our car centric culture and massive subsidies for automobiles. Chapters six and seven in my book, the Rise and Fall of Hayward’s Route 238 Bypass explain the problem.

The Master Plan should be revised to remove the parking structures and add Transportation Demand Management which would have the Beeline Bus, the College Heights Bus, and hourly parking fees instead of permits. Professor Donald Shoup’s The High Cost of Free Parking explains consumer choice economics making hourly or daily charges more effective than leases.
Modern buses, if properly designed based on advanced shuttle technologies and Travel Time Budgets, would take so many cars off of Harder and Carlos Bee that the intersection widenings would not be needed, traffic would be faster, and throughput would increase.

The admin should work with the City to avoid expanding highways and renegotiate the legal settlement based on improved intersection performance. Any consultant hired by the campus should be qualified in Dutch transportation engineering and vetted by Not Just Bikes to show how smaller streets can carry more traffic.

26. South campus recreational area clean up
Managed with East Bay Parks
Bottom this page, top of next: three auto wrecks on campus for last 50 years or so.
27. Live polling by students in the classroom

Tom Patterson, Bradlee Professor of Government & the Press at the Kennedy School of Government, Harvard University, is an email friend due mutual interests. He has developed live polling as an effective new teaching method to increase student involvement in citizen action. Here is what he sent me:

Live polling of students in the classroom has been shown to substantially increase in-class participation and change passive learning into active learning. Live classroom polling:

- Increases the level of in-class participation
- Stimulates critical thinking
- Turns passive learning into active learning
- Improves students’ speaking skills
- Increases students’ class interest and course evaluations
Programs like Poll Everywhere, iClicker, and Blackboard Collaborate enable instructors to conduct live polling in the classroom. Students might be asked, for example, which level of government – federal or state – poses the greater threat to their civil liberties. Once their responses appear on the screen, students discuss the reasoning behind their choice.

I offer a free webinar to present to instructors how such polling works. The Webinar discusses various classroom uses of Poll Everywhere with tips about the types of questions that are most likely to foster participation and critical thinking. Participants are provided a copy of a recording of the webinar recording and PowerPoint slides. I provide a separate slide deck with 75 Poll Everywhere exercises designed for use in the introductory American government course. For each major topic (such as Federalism, Political Parties, or Congress), there are four Poll Everywhere exercises, with slides, that instructors can use to help students understand the preferred alternative. All told, the slide deck includes 423 PowerPoint slides. -end-
He can be reached at Patterson, Thomas E. Thomas_Patterson@hks.harvard.edu or by emailing me.

Implementation: Any professor in political science or sociology can implement.

28. Citizen Education

Teach participation, not passivity using citizen participation workshops. This idea is another way in addition to live polling to educate students and give them the skills they need to participate in democracy.

The workshops would teach students how to participate in public life, not just talk about the system. Our courses teach knowledge about how the system works, but they also implicitly teach passivity by a failure to show how to participate. We need to teach students how to present their views and manage conflict among conflicting views in discussion. We need to teach the foundation concepts of citizen policy, complex advocacy, logic of collective action, free rider, and the intensity problem. Besides concepts, we need to make citizen action come alive by presenting case studies of citizen action on a specific issue. We need to show students how to disagree without rancor, but civilly.

The workshops would use handouts of old mail from public interest groups. I have, in storage, several boxes of old mail. The workshops would distribute random batches of this mail to students for their hands-on examination and discussion. They would learn how advocacy groups work and might find one that works for their values. Students are generally unaware of how to achieve policy goals they believe in and do not know about groups advocating for their goals. The workshops could make them aware of political activity important for them. The student might then actually use their new knowledge to become effective in speaking up and acting for something they believe in.

See Participation Education Project 2021.docx. Implementation: Any professor in political science or sociology can implement.

29. The “I Give” website

A faculty “I give committee” would vet a list of selected Public Interest Groups that advocate across a wide range of public policies and make it available for students to join or support as an important way for them to have political efficacy. The list would be used in teaching and on the campus website. It could include groups that conflict with each other, reflecting divergent views for democratic debate. The website could also include administrators, staff, faculty, and students who voluntarily ask that the groups that they support and the amount that they give be listed. Here is a current list of what I give.

Similar to the management of the “Challenges of American Democracy” essay, the faculty committee would exclude groups that advocate discrimination or allow advocacy of racism, sexism, other forms of discrimination, violence, propaganda, misinformation and lies.

This idea is another way to achieve democratic education like live polling and citizen action. Implementation: Three or more interested professors can implement.

30. Sustainability videos in the classroom

Canyon. The best videos can do a far better job of teaching than I ever could by lecturing. An annotated list is needed because some of the programs are dumbed down, vague, and lacking in content. The list would be used by professors teaching classes on the environment.

Implementation: Any professor of environmental studies can implement.

31. Teaching About Sustainable Mobility in Cities

We need to develop new curriculum to teach about sustainable mobility in cities. Topics include travel time budgets, density, transportation pricing reform, Walkable Neighborhood Systems, and opportunities for sustainable neighborhood development in corridors and centers. Such neighborhoods have auto trips below 20% of trips; 80% or more of trips are by healthy, safe, and convenient walking, bicycling, and transit.

The American debate over climate change emphasizes energy, transportation, housing, and industry, with too little attention paid to the external costs of suburbia and auto dependency: climate change, over-consumption of fossil fuels, air and water pollution, solid waste, auto accidents, noise, auto dependency, loss of community, a sedentary lifestyle, expensive housing, loss of farmland and natural areas, and other problems.

Many Western European cities have dramatically reduced car traffic while increasing the capacity of streets to serve people with sustainable modes. These policies reduce pollution and noise, improve health and safety, conserve energy, and foster sociability. This sustainable urbanism in Western Europe is largely ignored in the US.

New curriculum should use high-quality European videos on sustainable mobility that are found on sites like Street Films, Not Just Bikes, City Beautiful, Climate Town, Strong Towns, and Creative Commons.

One typical news article: “Enough About Climate Change. Air Pollution Is Killing Us Now” by Binyamin Appelbaum. “The best reason to stop burning fossil fuels is that air pollution is a threat to our health.”

See annotated list of high quality videos at European et al. urban videos.xlsx.

A search for videos on sustainable cities also produces a number of possibilities.

Implementation: Any professor of environmental studies, sociology, or political science can implement.

PROMOTE SUSTAINABILITY IN OUR COMMUNITIES

32. Plan Bay Area

In October 2021, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2050 (https://www.planbayarea.org/).

It is a plan for housing and transportation in the San Francisco region. However, it fails to consider Job Location Externalities and attempts to impose housing responsibilities (Regional Housing Needs Assessment) on jurisdictions that are not responsible for the problem. Plan Bay Area ignores how job surplus locations have caused the Bay Area’s housing and congestion problems. The dominant cities have imposed their ideology on the region and avoided their own role in the crisis. They have not built enough housing or provided enough transit to meet the need.

Cal State East Bay should create a faculty position for a professor who specializes in regional issues surrounding the university. The professor would report on the problem described above and would use the MTC Transportation Model to run scenarios that support
sustainability and equity and that provide for adequate mobility and housing. The region has 36 superdistricts with employed residents and jobs. Transportation infrastructure supports commuting but an excessive surplus of jobs overloads the system. The major surpluses are in downtown San Francisco and Silicon Valley. Job growth in those locations increases housing and congestion costs outside those areas more than the benefits that accrue to the local governments. The model can identify the point at which the jobs cost more than the value they create.

The professor would also analyze other policies in Plan Bay Area. The reports would be distributed to regional stakeholders in the Bay Area: besides MTC and ABAG, they include the Bay Area Air Quality Management District, San Francisco Bay Region Water Quality Control Board, and Bay Conservation and Development Commission, which are also regional agencies. They include City and County government. At the University of California Berkeley, they include the Terner Center on housing, the Fisher Center on real estate, the College of Environmental Design, and the Department of Transportation Engineering. There are two major business groups in the Bay Area, the Bay Area Council and Silicon Valley Leadership Group. Citizen advocacy groups include the Sierra Club, the League of Women Voters, the Transportation Defense and Education Fund, and the Bay Area Transportation Working Group.

I have done some work on these issues. See Planning for the Economy. Implementation: The School of Economics and Business would implement.

33. The real Bay Area regional economic product

The primary job of the Professor of Advanced Sustainability would be research using computer modeling for economic simulation of the real economy of the Bay Area. The real economy includes the non-monetized cost of GHG and of Job Location Externalities. The research would integrate environmental costs and transportation pricing reform into monetary modeling. The regional model would include input/output relationships, quantification of external costs, and elasticities from pricing reform. The model would show a shifting of the economy from money alone to money plus other economic values. Total product including the benefits of reduced externalities exceeds some loss of monetized product.

The modeling would project the results of pricing reform compared to doing nothing. The research would counter the overemphasis on money which reports “the price of everything and the value of nothing.” It would break new ground on the concepts of Growth Without Growth and Taxing Goods, Not Bads. Quantification of the excess number of jobs in the four extreme surplus MTC Superdistricts would then be related to reform of the Regional Housing Needs Assessment, exposing its hypergrowth assumptions and the ideological domination of the region by the leadership of the largest cities.

34. Hayward Planning Issues

Cal State East Bay is located in Hayward, but not part of it. The campus depends on the city, but has isolated itself and has alienated many Hayward people. The campus cut off access from Harder Road to Hayward Boulevard, forcing long detours. The campus changed its name from Hayward to East Bay. The campus cut off access from Campus Drive, which was built at public expense to reach the campus. The campus tried to impose costs on city services without paying for them, requiring the City to go to court and win judgements forcing the Cal State
system to pay up. Another case went to the Alameda Superior Court and again required the
campus to mitigate traffic impacts. Litigation stopped the anti-environmental Meiklejohn
parking structure.

Major planning issues in Hayward include

- Loop reform (street diets, two way, bicycle lanes, sidewalks; AB1386 funds)
- Improved, safe pedestrian crossings downtown
- Reducing traffic, narrowing other arterials
- Modern market-based, easy-pay parking charges on public streets and parking lots
- Segregated bicycle lanes on arterials, the East Bay Greenway Project
- The downtown circulator from BART to Lincoln Landing
- Better designated for taxi stands and Lyft pickup lanes at Hayward BART and the
  county center on Amador.
- No new parking structures; no new parking within other structures
- Unbundle parking costs from living costs in rentals.
- Walking-oriented development on vacant lots and parking lots downtown
- A BART-accessed convention hotel next to BART on the Montgomery St. BART lot.
- A new Greyhound Bus station at Hayward BART
- Neighborhood parking permit programs

Similar to Plan Bay Area, Cal State East Bay should have an academic who specializes full or
part time in planning issues that would help the City and Cal State East Bay. Students would be
involved in various studies, which could help them pursue careers in city planning.

Ideas described above in this report relating to Hayward planning include Beeline Bus,
College Heights, Village Bus, Pioneer Way, and Walk access to campus.
See Ideas for Downtown Hayward
(https://hapaforhayward.files.wordpress.com/2019/04/ideas-for-downtown-hayward-1.pdf)