

Monday, November 19, 2007

Special Meeting

Members:

| | | | |
|----------------------|------------|--------------------|----------------------------------|
| Jane Seleznow | District 1 | Mike Petouhoff | At Large |
| Louise Bedsworth | District 2 | Parin Shah (Chair) | Mayor |
| Ian Kim (Vice Chair) | District 3 | <i>Vacant</i> | Mayor |
| James Lutz | District 4 | Richard Heinberg | Mayor |
| Shannon Graham | District 5 | Patrick Tang, Esq. | Deputy City Attorney |
| David Room | District 6 | Alice Glasner | Public Works Legislative Analyst |
| Richard Register | District 7 | | |

BUSINESS MEETING: 6:00 pm to 9:00 pm

Hearing Room 3, City Hall, One Frank H. Ogawa Plaza

AGENDA^{*}

1. Roll Call and Establishment of Quorum.
2. Open Forum.
3. Approval of Draft Minutes of November 8, 2007 meeting. (A)
4. Continued Discussion (from October 18, 2007 and November 8, 2007 Meetings) of Task Force Recommendations and the Final Action Plan, Including its Format, Organization, Prioritization, Content, and Development of Executive Summary. (I/A)
5. Future Agenda Items. (A)
6. Announcements. (I)
7. Adjournment.

*The order of the items on the Agenda may be changed by the Chair.

I = Informational Item

A = Action Item

Persons may speak on any item appearing on the agenda; however, a Speaker Card must be filled out and given to the OIO Task Force administrative representative *before that item is called*. Multiple agenda items cannot be listed on one speaker card. If a speaker signs up to speak on multiple items listed on the agenda, the Chairperson may rule that the speaker be given an appropriate allocation of time to address all issues at one time (cumulative) before the items are called. All speakers will be allotted 3 minutes or less – unless the Chairperson allots additional time.



This meeting is wheelchair accessible. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in the meetings of the Oil Independent Oakland By 2020 Task Force, please contact the Office of the City Administrator at (510) 238-3301. Notification two full business days prior to the meeting will enable the City of Oakland to make reasonable arrangements to ensure accessibility. In compliance with Oakland's policy for people with chemical sensitivities, please refrain from wearing strongly scented products to events.

If you have questions or concerns regarding this agenda, or to review any agenda-related materials, please contact the Oil Independent Oakland (OIO) By 2020 Task Force at (510) 238-7031.



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Thursday, November 8, 2007, 6:00 pm to 9:00 pm
Hearing Room 3, City Hall, One Frank H. Ogawa Plaza

Draft Minutes

Members:

| | | | |
|----------------------|------------|--------------------|----------------------------------|
| Jane Seleznow | District 1 | Mike Petouhoff | At Large |
| Louise Bedsworth | District 2 | Parin Shah (Chair) | Mayor |
| Ian Kim (Vice Chair) | District 3 | <i>Vacant</i> | Mayor |
| James Lutz | District 4 | Richard Heinberg | Mayor |
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| David Room | District 6 | Alice Glasner | Public Works Legislative Analyst |
| Richard Register | District 7 | | |

Members Present:

Bedsworth, Heinberg, Graham, Room, Shah, Register, Petouhoff, Seleznow

Members Excused:

Heinberg, Kim, Petouhoff

Staff Members Present:

Alice Glasner, Public Works Committee Legislative Analyst

BUSINESS MEETING

1. Roll Call and Establishment of Quorum.
 - a. The meeting was called to order at 6:10 pm. Roll was called and a quorum was established.
2. Open Forum.
 - a. Two members of the San Francisco Peak Oil Task Force introduced themselves: Pat Gerber and Jean Rosenmeyer..
3. Approval of Draft Minutes of October 18, 2007 meeting.
 - a. Minutes were approved, as drafted, with abstention by TFM Lutz, who was excused from the October 18 meeting.
4. Continued Discussion (from October 18, 2007 Meeting) of Targets for Petroleum-Use Reduction.
 - a. At the Chair's suggestion, the Task Force agreed to combine the discussions of items #4 and #5.
5. Continued Discussion (from October 18, 2007 Meeting) of Task Force Recommendations and the Final Action Plan Framework, Including its Format, Organization, Prioritization, and Content, and Development of Preamble/Introduction.
 - a. Chair Shah presented the latest draft of the Task Force's document.
 - i. On "overview", sections within the chapters has individual, city, etc actions, plus short and long term targets.
 - ii. There was a review of the 3% oil consumption reduction goal--- give individuals an idea of how to do that. New City office staff would move this forward. Oakland citizens should be shown how to do this in the subsection.
 - iii. There should be a diagram that shows what can be done in each realm (individual, city, city leadership in region) to meet the oil reduction goal. TFM Graham will draft this.
 - iv. TFM Register stresses the need to attack the large challenges and not just the low hanging fruit; look at the city like an organism and make aggressive land use

changes. TFM Lutz responds these recommendations are in the draft but perhaps need strengthening

- v. TFM Graham and Bedsworth respond that some actions will take decades to implement and indeed, efficiencies may indeed cause more problems as indicated by the work of K. Small (e.g., <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1026&context=ucej>), though they are still important.
- vi. Task Force suggests that recommendations, such as those in the land use section could use specific examples from other places, as resources/references for council and staff. TFM Register mentions relevant mapping examples from Berkeley, Adelaide, Australia and elsewhere.
- vii. Chair suggests new staff or consultants brought on board to prioritize recommendations, pull together data and other resources.
- viii. Bedsworth suggests prioritization or reorganization of the land use recommendations. TFM Register should work on this related to the “silver sequence”, as well as develop executive summary language regarding the “sense of emergency” context.
- ix. TFM Graham suggests a diagram could depict the “silver sequence”, what is needed first necessarily or building blocks. Showing complexity and interconnectedness to the decision-makers. Some of the items on list might be stand alone.
- x. TFM Seleznow stresses having the top priorities in the executive summary.
- xi. TFM Bedsworth asks if there are local examples of positive land use. TFM Register mentioned Downtown, Fruitvale, and others have some pieces of the recommended suite of actions that will be recommended. TFM Graham and Lutz suggest that the report should acknowledge supportive efforts already taken or underway.
- xii. TFM Register discussed the problems with biofuels when food crops or arable lands are use to grow “fuel oil crops”. This should be stated in text. TFM Lutz says this subject is relevant to the region in terms of research funding.
- xiii. Remember report should guide the individual how to reduce consumption, for a citizen “outreach and education section”. Add bibliography at end to support. These could be placed in boxes in each section, as in Plan NYC.

b. last section—City Operations and Public Education

- i. 1 through 7 talk about how city can help people be successful
- ii. 4,5,6 could be grouped
- iii. 2 and 3 could also be bundled.
- iv. 1---- could be moved to the beginning of the report
- v. There could be a separate section with direction/ thresholds for contingency planning. Define emergency, such as when the price per gallon exceeds minimum wage. Propose drastic actions. The proposed office could be responsible for this. What are the actions that the city could take? Can MTC do something in an emergency? [Related---State requires that fueling stations are available once a certain number of vehicles with alternative fuels are in use—]
- vi. Ms. Gerber from San Francisco suggests including a section on regional communications: e.g., computer and cell phone networks.

c. Assignments, to be turned over to the Chair for incorporation:

- i. TFM Register---silver sequence, examples, summary
- ii. TFM Petouhoff—get up to speed with relevant work in CEDA

- iii. TFM Shah will contact Radulovich: Get feedback on drafted transportation priorities.
- iv. TFM Bedsworth—work on fleet, car share, bike use (8, 10 & 11 from draft)
- v. TFM Room—7, bicycle master plan.
- vi. TFM Graham and others in Trans Group--- boxes showing what individuals can do.
- vii. Universal Transit Access
- viii. TFM Kim--Port and consumer goods (with input from Lutz and Heinberg), Green jobs, equity, sample policies, ordinances, and programs.[TFM Seleznow suggests that the document report lack of contingency planning at Port, and the High Speed rail be recommended in this section]. One guest suggested that recommendations include the Port hiring of enforcement or monitoring staff.
- ix. TFM Heinberg—craft resolution for #1 on City Operations, etc. section.
- x. TFM Shah--- City Ops-- #2, #3, and #4, 5, 6.
- xi. TFM Lutz--- ideas around contingency planning
- xii. Land use infrastructure section should have something regarding required infrastructure for alternative fueling.
- xiii. TFM Room—CCA--- could be with #10 in City operations section.
- xiv. TFMs Graham and Shah—look at funding for “office of energy sustainability” and potential partnerships with local universities. This could go into the combined section 2 & 3.

6. Future Agenda Items.

- a. The next agenda should include: virtually the same items except the “petroleum depletion targets”.

7. Announcements

- a. Next meeting dates: Meeting Dates: November 19, December 6, and December 20.

8. Adjournment

- a. The Task Force adjourned at approximately 8:45 p.m.

Continued Discussion
(from October 18, 2007 and November 8, 2007 Meetings)
of Task Force Recommendations and the
Final Action Plan, Including its Format, Organization,
Prioritization, Content, and
Development of Executive Summary.

Oil Independent Oakland (OIO) By 2020 Task Force

Executive Summary

Opportunities and Challenges - We are at a flashpoint

The globalized economy has bound us together in a web of mutual dependency this has both positive and negative impacts. Today the human race has better chances than ever before of solving the enormous challenges we face. Achieving the goal of oil independence here in Oakland or elsewhere in the world will require a new way of thinking and resolute action appropriate to the true emergency we face.

Declining access to conventional oil, in combination with our joint responsibility to stop global warming, will be a test of Oaklander's and the global society's readiness to switch to energy systems that are more sustainable in the long term and provide economic benefit to all. Basically, it is a question of the will to show solidarity with present and future generations.

The Oil Independent Oakland by 2020 Task Force (OIO) has concluded that cities everywhere and Oakland in particular, must simultaneously adopt policies and actions that immediately bring about greater efficiency in our energy systems and transform the urban form. In transforming the urban form we mean from the foundations in basic land use patterns on up through building design, appropriate technologies, creation of green jobs, and transformation of personal lifestyles and civic efforts to avert potentially catastrophic economic, social and ecological conditions.

Peak Oil

Oil depletion presents a unique set of vulnerabilities and risks. If policy makers fail to understand this, the resulting policies may leave society mired both in internal economic turmoil and external conflict caused by fuel shortages, to the point that the pursuit of international climate policies becomes much more difficult than is already the case. This would truly be a worst-case scenario.

Policy makers may assume that, in addressing the dilemma of global Climate Change, they are also doing what is needed to deal with the problem of dependence on depleting petroleum. This could be a dangerously misleading assumption. On the other hand, if nations were to try to mitigate the economic impacts of oil depletion by producing large amounts of synthetic petroleum from coal and other low-grade hydrocarbons, the climatic effects could be catastrophic.

Fossil fuels have delivered enormous economic benefits to modern societies, but we are now becoming aware of the burgeoning costs of our dependence on these fuels. The human community's central task for the coming decades must be the undoing of its dependence on oil, coal, and natural gas in order to deal with the twin crises of resource depletion and climate chaos. It is surely fair to say that fossil fuel dependency constitutes a systemic problem of a kind and scale that no society has ever had to address before. If we are to deal with this challenge successfully, we must engage in systemic thinking that leads to sustained, bold action.

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The Oil Depletion Protocol

One way to avert or ameliorate the impacts of Peak Oil would be to implement a citywide commitment to proactively, cooperatively reduce the use of oil (effectively, a reduction in *demand*) ahead of actual production declines. Setting a bold but realistic mandatory target for demand restraint would reduce price volatility, aid with preparation and planning, and reduce international competition for remaining supplies.

The Oil Depletion Protocol would set a target of about 3% reduction per year in oil consumption, but would not specify how nations might achieve this goal. In order to enlist public support for such efforts, governments would need to devote significant resources to public education campaigns. In addition, planning and substantial public investment would be needed in three critical areas: transportation & land-use, agriculture, and chemicals industries.

Solutions

In this document, we propose a number of far-reaching, concrete measures that can end our dependence on oil by the year 2020 and tangibly reduce our use of oil products. Our ambitious objectives are as follows....(need to do after full report is done)

All this means that we can both reduce oil use and emissions of greenhouse gases. We can also secure our supply of energy, strengthen our economy and promote the development of sound growth driven by technology, planning, equity, and environmental balance.

In short: the phase-out of oil can further strengthen our position as one of the country's leading cities in sustainable development. However, our ambitions are not really new. They have a long previous history. And they will obviously need to be followed up and intensified in the decades following 2020.

List past successes.....(request from staff)

Naturally, efforts to make more efficient use of energy and the phasing out of both oil and other fossil energy carriers will need to continue for decades after 2020. This is connected above all with climate policy and the already existing objectives and requirements to reduce by 2050 emissions of greenhouse gases by 80 percent compared with 1990 levels of emissions as called for in AB32.

We want to be at the forefront in the gradual use of resource-efficient lifestyles and renewable technology – electric buses and street cars, urban villages, solar cells, universal transit access, and also technology we cannot know anything about yet or can just divine. We prepare for this type of development in our proposals by incentives for promoting less oil intensive transportation and land use planning as well as research, development and commercialization of new technology.

We would also like to underscore the need for partly new values and a way of life based to a greater extent on solidarity, at both national and individual levels. The role of homes and schools is therefore important, and we need to support the bearers of ideas, the popular movements, in their ambition to encourage new thinking and a deeper understanding of our world.

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Proposed Outline of Final Report v1

Overview and Background

What was the Oil Independent Oakland Task Force?

1. Charter
 - A. Mission and Members
 - B. Similar efforts
2. Scope
3. Key Drivers of Oil Dependency
4. Classification and Prioritization Scheme/Approach
 - A. Action Plan Chapters
 - i. Land Use and Transportation
 - ii. Ports and Consumer Goods
 - iii. Implimentation and Public Education
 - iv. New Section without a name
 - B. Sub-sections within the Chapters
 - i. **Individual Actions** include actions that individuals, households and businesses can make to reduce their consumption of oil. In general, these actions can be taken independent of any government action and involvement (e.g. ride your bike to work). At times the degree to which the population can actual undertake these actions will depends on enabling action by the government (e.g. development of bike routes)
 - ii. **City Government Actions** include actions that the City can take to either reduce its own direct consumption of oil (e.g. move to electric vehicle fleet) or enable its population to reduce their consumption (e.g. purchase fleet of electric vehicles to lease to citizens)
 - iii. **Leadership Initiatives for Regional Actions** include actions that the City can take with other local governments, organizations or the State that require collaboration for development and implementation (e.g. regional congestion charge)
 - C. Timing of Potential Actions
 1. Short Term-1-3 yrs/Medium Term: 4-7 yrs/Long Term: 8-12 yrs

| | | Actions | | | Timeframe | | | |
|----------------|--|---|------|------------|-----------|-----------|------------|---|
| | | Individual | City | Leadership | 1-3 years | 3-5 years | 5-10 years | |
| Transportation | | PROMOTE PUBLIC TRANSPORTATION | | | | | | |
| | | Expand Public Transit – Bus Rapid Transit | | | ? | | ? | |
| | | Expand Public Transit – Municipal Street Cars | | ? | | | | ? |
| | | Expand Public Transit – High Speed Rail | | | ? | | | ? |
| | | Expand Public Transit – Regional Transport | | | ? | | | ? |
| | | Increase Walking | ? | | | ? | | |
| | | Increase Bike Usage | ? | ? | | ? | | |
| | | Provide Universal Transit Access | | ? | | ? | | |
| | | Provide Public Transportation Education | | ? | | ? | | |
| | | ENCOURAGE TRANSPORT SHARING | | | | | | |
| | | Support Expanded Car Sharing | | ? | ? | ? | | |
| | | Support Dynamic Ride Sharing | | ? | | ? | | |
| | | Expand Car Pooling | | ? | ? | ? | | |
| | | Promote Bike Sharing | | ? | | ? | | |

Chapter 1
Reducing the Oil Intensity Through Transportation and Land Use or
DRIVE LESS

Introduction: Back to the Future

o Impact: Lower GHG emissions-More Resilient Communities

1. Post World War II dream- Cheap Cars and Cheap Oil
 - A. Growth of Suburbia
 - B. Decline of Inner Cities
 - C. Mono Use zoning
 - D. Two Car Family (SUV and Sedan)
 - E. Drive a distance to work and shop. e.g. Get in car and Park to get a loaf of bread

2. Fallacy of Composition
 - A. Sprawl
 - B. No sense of community
 - C. Car as status symbol
 - D. Long Commutes
 - E. Eats up land-Less open space and agricultural land
 - F. Traffic Jams

3. The low carbon oil independent lifestyle
 - A. Vibrant higher density communities
 - i. Easy walk or street car ride to daily retail needs
 - ii. Lively community appropriate shops and eateries
 - iii. "Urban Nature"- communities near the edge of natural amenities such as waterfront and greenbelts
 - iv. Oakland transit is nearby, safe and 'fun'
 - v. Nearby public amenities, parks, and streetscapes
 - B. Healthier residents and lifestyles
 - i. Walking and biking encourage healthy lifestyles
 - ii. Low carbon = sexy
 - iii. Shorter commutes = more time with family
 - C. Community character
 - i. Families of range of incomes live in proximity
 - ii. Unique community character
 - iii. Greater sense of identify with community
 - iv. Community eyes on the street means less crime
 - D. Greater Resiliency
 - i. Less of family income spent on cars and gas
 - ii. Two car family
 - iii. One hybrid for long trips and
 - iv. One electric car, for shorter trips
 - v. Bike or walk to work

City Design is at the Core of the Issue

- The solution will take many forms, but urban design is at the root of high energy, especially petroleum use.
- European Cities have street grids that formed before cars.

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- Far less energy use per person, though similar automobile technologies are on the street.
- Even in the US, in cities with older roots such as New York, energy use is 1/2 per capita that of L.A.
- While alternative energy, better cars, and alternative fuels all have a role, they are more focused on the symptoms than the root of the problem.

Listing of Recommended Actions for Transportation and Land Use

1. Urban Villages
 - A. Mapping for GP Amendment
 - B. Design of Vitality Centers and zoning policies to bring “live”, “shop” and “work” closer
 - C. Proactive Architecture & Design Review Standards to make density *livable and vibrant*
 - D. Financing and Public Amenities to support a positive transportation hierarchy, and affordable access
 - E. Transfer of Development Rights to de-emphasize development in conservation areas
2. Promote public transport
3. Encourage transportation sharing
4. Disincentives for private autos
5. Promote less oil-intensive transport
6. A Model City Fleet

1. Urban Villages - The Silver Sequence

Land use changes are in order at the foundation of oil demand in Oakland and in all cities, towns and villages in this country and others where automobiles have reshaped cities over vast distances, setting in place dependence on massive use of transportation fuels.

We need to identify centers of vitality, building them up with more density and diversity of activity, often called “mixed uses” among planners. We need vigorous commitment to and economic investment in renewable solar, wind, hydro and geothermal renewable energy sources and in transit and bicycle transportation as part of the overall pattern. Each neighborhood, major district center and the downtown can be like a living organism in its own right providing the full range of many or most of its needs for housing, employment, food, everyday services, basic education and transportation to other areas in our urban region and beyond. The close analogy is with the organs of any animal – all are required in compact arrangement. These centers of the city, where all the “organs” of housing, jobs, culture, transport, etc. are present, are potentially healthy units within the larger city and the region. In our deliberations these were called variously “vitality centers” or “urban *fractals*” being a fraction of the whole with essential components (housing, employment and so on as mentioned above) present and arranged appropriate to climate, sun angles at particular latitudes, type of energy and soils available, history and projections into an energy and climate constrained future.

This approach is similar to the one that promotes “transit villages” or “Transit Oriented Development” (TOD) but takes the notion farther. It promotes development of growing vitality centers of serious scale while restoring open space for nature and food growing. Planning for such vitality centers promotes making the centers more like semi-self-reliant real small cities, towns and villages in their own right. This is the pattern to radically reduce energy demand

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and make an orderly transition to the best of the renewable energy sources available in the future. Energy is saved through far better operation of transit, enabling people to walk or bike many more places and through clustering of units in apartments and condos that share walls and thus energy for heating and cooling in very large measure. This represents energy use reduction by demand reduction at its land use foundation.

The Oil Independent Oakland Task Force members agreed that there is no single overriding “silver bullet” to solve the problem of society’s oil dependence. Many particular policies, actions and decisions by individuals are called for but the sequence of moving from largest arrangements of the city, up through the architecture and on to the attached and sheltered technologies and life styles gives us a means of ordering our thinking and shaping our strategy for best results.

With the awareness of what then is required for a very low energy, smaller ecological footprint future for Oakland we can then list the jobs that are truly green and those economic activities we need to invest in. In this we see the very positive potential of moving away from automobile and oil dependence, placing the indispensable larger and more difficult issues squarely at the beginning of the planning process. We were well aware of the tendency to postpone the knottier problems and agreed they have been postponed far too long already, thus causing much of the energy, environmental, climate and economic problems we now see surrounding oil dependence.

“Silver bullets” are single solutions to single problems. We promote a principle that states one should go for the solutions first that contribute to the most solutions simultaneously, not just one solution.

Getting the land uses right in cities solves most of the energy problem by reducing demand dramatically, thus profoundly reducing dependence on oil and helping solve climate change problems. It also makes possible preservation and recovery of land for nature and agriculture, restoring food gardens near home and natural environments. By providing the services of the city without having to spend massively on cars and automobile infrastructure it serves lower income people and goals for social justice. Since cars, promoted by sprawl and vice versa, land uses that liberate us from dependence on car and gasoline serve safety and security goals as well. It is hard to get more solutions from one approach than those attained by reorganizing city land uses on the basis of ecological principles.

One of the most difficult problems of all is rezoning, which is at the crux of land use solutions. But it is also something that is generally exclusively in the control of city governments. We don’t have to wait for Federal or State initiative or regional agencies to solve the biggest problems for us – we can tackle them through the zoning that is in the power of cities to do on their own. To avoid or postpone re-zoning for ecological and energy health is to avoid the first step on the “silver sequence.” It should be understood to be the solution at the foundation of numerous other solutions built upon it and the means to by far the highest energy and land efficiencies attainable in moving away from oil.

1A. Mapping for GP Amendment

Ultimately, we need to make our cities ecologically healthy. Humanity does not live separately and independently from nature. Learning from nature we can create ecologically healthy, low

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energy vitality centers something like urban villages and vital towns linked by very energy efficient transportation.

(Details) (Details can include places where “eco-mapping” has occurred if not yet applied: Berkeley, Los Angeles and Gold Coast, Australia. In other places the techniques furthered by eco-mapping are applied including Saint Paul, Minnesota, by area plan and development paired with creek and lake restoration, South Lake Tahoe, by transfer of development rights (TDR) and Johnson Creek in Portland Oregon, by direct use of city tax revenues.)

Mapping can be used to help identify existing centers of vitality with *high density* and *high diversity* of land uses, to further an Urban Villages approach.

Must be coordinated with existing and planned transit.

Existing Land Use and Transportation Element (LUTE) of the Oakland General Plan dates back to 1998 and is ripe for an update

Recommendation: Planning should update 1998 LUTE of the General Plan by amendment

- Use GIS Mapping Tools to identify existing vitality nodes as priority areas for density development.
- Evaluate diversity of uses and plan to remedy shortfalls
- Coordinate with Short and Long Term Plans of AC Transit and BART, ABAG and MTC
- Needs community engagement for each area
- Vitality centers... Aspects evaluated in diversity of use
- (Insert chart of diversity evaluation areas)
- AC Transit BRT and other plans (insert graphic)
- BART Regional Rail Plan (insert graphic)
- ABAG Focus Program

Recommendation: Amend General Plan (1998 LUTE), Taking into account:

- Urban Villages Mapping
- AC Transit BRT Plans
- BART Regional Rail Plans
- ABAG Focus Program
- Look at Vancouver Plan as one model
- <http://www.vancouver.ca/engsvcs/transport/plan/index.htm>

1B. Design of Vitality Centers and zoning policy

Minimize parking, car-free by contract housing in centers, expanding pedestrian streets and zones. (Details)

- Oakland has a general need to update zoning with general plan
- Updated tools may be needed for the toolbox
- The fundamental premise of zoning- sequestering use types- may be needed to be overhauled:
 - Is there a need to separate “residential” areas from “polluting” “industrial” job centers in all cases?
 - Economic Trends are towards jobs in new types of businesses
 - The job base is shifting towards much smaller businesses

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- The job base is shifting towards more service oriented business (rather than manufacturing)
 - At least some manufacturing can be “clean”
 - The above may be candidates for co-location of jobs with residential areas
- Urban Villages or Community Oriented Development (COD) to create *access by proximity, with a hybrid type of mixed use that* puts job centers near residential and retail to join all three legs of use diversity- live, shop, *and work*
 - Most current mixed use focuses on residential and retail components
 - Define environmental performance standards in a CEQA context, for types of job inducing, clean commercial/industrial uses that would be appropriate
 - Evaluate crime reducing benefits of high diversity of use, with active eyes on the street rather than a “ghost town” effect that ensues when workers go home at night from monolithic use areas.
 - Coordinate with Mayor’s Green Jobs and Land Use Task Force
 - Eliminate uncertainty caused by speculation and difference in Zoning and General Plan
 - Create specific development goals for job creating zoning
 - “Specific Plans” may help add further definition
 - Utilize North San Jose approach to planning for job creation
 - Designate some areas for no residential job creating opportunities (e.g. Oakland Army Base has existing no-residential Tidelands Trust restriction)
 - In some locations, use residential development to help fund job creation opportunities (where compatible) in a mixed use residential-commercial-industrial- retail environment
 - *Evaluate Oakland’s own C-27 Zoning or similar zoning for Business Districts near residential*
 - *Evaluate North San Jose plan’s focus on Jobs as current planning effort unfolds*
 - *Create certainty as to what city wants with General Plan, Specific Plan, and Zoning and let market respond*

Zoning Policy Transit Village Planning Recommendations

- Evaluate BART Transit Oriented Development Guidelines for application to Oakland
- Evaluate-coordinate with Transit Village Planning Efforts currently underway in locations like San Jose/Santa Clara Transit Village

Matter of degree... is the focus on the Transit or the Community

(Insert graphic to illustrate difference in transit focus verses local community focus)

Zoning Policy: Parking

- Parking and traffic congestion is an important aspect of high density development
- In theory, high density and high use diversity should reduce auto usage, but, one of the major objections to high density development in Oakland is traffic and parking congestion
 - May be a short term issue as use diversity builds
 - E.G. New York City has low energy use per person and low car ownership. The density and use diversity is such that not owning a car is common
- Oakland City parking ratios are still in effect
- Market Risk: Even those attracted to “in town” living may not be ready to give up their cars. Thus lenders are reluctant as well
- Car free provisions for senior housing are considered realistic
- Parking ratio credits near transit may be more acceptable

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- “Shuttle” solutions may help as well
- Movement within activity centers
- Movement to BART Stations
- Utilization of empty BART Parking at night
- May be street car system

Parking Policy- Oakland 1961 Parking Policy example

- In 1961 Oakland adopted a new policy of requiring one parking space per dwelling unit for apartment buildings
- Brian Bertha- housing economist collected data for 45 projects prior to change and 19 projects after the change
- Results:
 - Cont cost went up
 - Investment in land, density, and land values went down
 - Rents went up, for larger, but fewer units

| Variable | Before | After | Change | % Change |
|----------------------|---------|---------|---------|----------|
| Const Cost (\$/DU) | \$6,613 | \$7,805 | \$1,192 | +18% |
| Density (DU/Acre) | 77.5 | 54 | -23.5 | -30% |
| Investment (\$/Acre) | \$513K | \$421K | -92K | -18% |
| Land Value (\$/Acre) | \$217K | \$145K | -\$72K | -33% |

Parking Policy- San Francisco for-Sale Example

- SF requires one off-street space for each new dwelling unit
- Wenya Jia and Martin Wachs at UC Berkeley studied conflict between affordable housing and parking availability in San Francisco (1998) through hedonic regression analysis
- SFD without parking \$348K
- SFD with off-street parking space \$395K
 - Difference of \$47K
 - Translates to 24% less households able to buy a home when this difference was translated to income share for housing

Parking- Electric Avenue Project with Car Share- In Vancouver

- 465 Unit Condominium Project in Vancouver
- Includes an On Site Car-Share program with 7 cars
- Four Toyota Prius hybrids, a station wagon, a van and a pickup
- Will be stored on site and available to condo owners who join up with the Co-operative Auto Network for interim use
- The fleet was carefully chosen to give users the widest possible usage, from simple car use to moving groups of passengers or bigger items.
- On Site program provides convenience and a critical mass of users for higher utilization
- Can realistically reduce parking ratios and car use

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Parking Recommendations

- Additional look at Don Shoup's Work at UCLA as background, the idea of subsidized bundled parking (embedded into overhead) rather true ala cart pricing
- Historical Impact of Oakland's Parking Ratio Requirement and extra parking cost on Housing Affordability
- Dan Zack's work in Redwood City as a Bay Area example of implementation of Market Rate Parking
- <http://pedshed.net/?p=105>
- Examine Applicability of "Car Free by Contract" to Oakland on a pilot basis or for particular areas or types of uses
- Provide developer incentives to reduce parking ratios where parking can be unbundled and those not choosing parking can participate in onsite car share program-
 - Provides ready cadre of car share users in the same place to increase utilization
 - Cost savings from not choosing parking increases affordability

Car Ownership and Affordability in Vancouver

- Gordon Price of Vancouver translated the car ownership cost avoidance to housing affordability
- Canadian Automobile Association estimates that an average car costs \$9,000 a year to own and maintain.
- Take that money to pay down a mortgage each year, and you can afford another \$100,000 of home mortgage, assuming current interest rates.
- Individual savings would vary from these averages, but the savings is substantial
- Car share within a building or density node creates realistic alternative to care use and parking issues.
- Cars could be electric as well for short rang trips

Zoning Policy- Retail Balance

- Lack of Retail Balance means more vehicle trips out of the city and greater Petroleum Dependence
- Oakland residents often leave Oakland for prime retail shopping. Conley consulting group found Oakland retail leakage includes:
 - \$1 Billion/Year in Oakland Residents going outside Oakland
 - \$10M loss in sales Tax revenue
 - About 10,000 potential retail jobs
 - Potential for about 5 Million SF of Space (new construction and construction jobs)
- An analysis of Oakland's tax base shows it to be highly dependent on residential parcel tax with lower sales tax ratios than comparable cities
 - *Bakersfield* 51%
 - *Concord* 40 %
 - *Fresno* 35 %
 - *Stockton* 35 %
 - *San Diego* 17 %
 - *Oakland* 9%
- City's current focus through Conley Consulting Group is focusing on arterials of Broadway, 27th Street, and Valdez Street

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Retail Balance Policy Recommendations

- Look at both local serving retail and regional comparison shopping.
 - Local Serving (how far do you have to go for a loaf of bread or a dry cleaner)
- Ensure residential areas have a good mix close to residents rather than “mono-use” zones.
- Use GIS mapping as planning tool
- Reduce and shorten trips for daily/weekly items
- Walking distance to residential centers where possible
- Can encourage grocery stores that promote *local foods* as further means of oil independence
- Regional Comparison Shopping (do you have to drive to Walnut Creek for the latest fashion)
- Give priority to Transit Proximity
- Consider street car system as part of streetscapes to add mobility and charm
- Require electric car charging stations as part of parking solution
- Good for retailers: More resiliency to oil supply shocks

Zoning Policy- Retail Balance-Crime Aspect

- Fear of crime scares many retailers away
- Potential for *high diversity of use* to break the cycle
- More local retail reduces trips while high use diversity makes more eyes on the street

Zoning Policy- Housing Balance

- A balance of housing that reflects the diversity of the workforce, means more people can live near where they work
- Creates greater resiliency to oil Supply Shocks
- Oakland Blue Ribbon Panel has studied affordable housing with recommendations still being considered by council:
 - For Market Rate projects over 20 units
 - First Two years 5% on site or 10% off site
 - Third Year 15% on site or 20% off site
 - In-Lieu fee option
 - Transfer Tax from first sale of market rate units would be used to support affordable housing
 - Focus of above is low income (below median)
 - City Redevelopment Agency contribution recommended to increase from current 25% (legal minimum is 20%) to
 - 35% in two years
 - 50 % within 5 years
 - Focus of the above is very low income

Zoning Policy- Housing Balance

- Recommendations
 - Use GIS Mapping to support planning location of high density (over 20) units in appropriate locations
 - Especially for very low income housing controlled by RDA, ensure transit proximity as a priority in siting to insulate the poorest among us from oil supply and price shocks
 - Consider Car Share as an affordability measure with less cost towards parking for project and less income dedicated to car ownership.
 - Consider workforce housing as part of RDA controlled housing (not necessarily low income) for people who need to work in city

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- Police and Fire- Community Building Aspects for public safety professionals to live within communities they serve
- Teachers near schools
- Would imply designating family rental units with portion of pay dedicated to rent while under Oakland or OUSD employment

Social Equity Aspects

- More Jobs in Oakland
- More jobs closer
- Less dependence on the cost of a car in general
- Less dependence on a car to get to work
- Using the density and transit premiums as a means to create value that funds affordable or inclusionary housing requirements, out of land value premiums, not developer margins
- Across the board through zoning and general plan, to come out of land value premiums, not project specific!

Social Equity-Public Participation and Redevelopment Aspect

- Many of the Activity Nodes and Transit Centers are located in redevelopment areas
- Ensure Transit Development is coordinated with RDA
- Ensure "Project Area" 5 year plans reflect transit as well as affordability requirements
- Ensure "Project Area Committee (PAC)" is used to define economic redevelopment and affordable housing objectives
- PAC is required in "Project Areas", but *may be* created for any "Project Area"
- Use this input to make as much of the RDA solicitation process competitive as possible, so developers compete for entitlement rights based on publicly defined goals
- Oakland has a huge portion of the city defined in RDA Project Areas (about 40%)
- Oakland has 3 Project Area Committees now formed

Financial Strategy

- Create and Capture Land Value Premiums with proactive across the board rather than reactive project specific approaches
 - Transit
 - Density
- Infrastructure Impact Fees
- Improvement Agreements
- Affordability requirements coordinated with RDA areas
- Transit Funds e.g. MTC
- RDA Tax Increment with investment strategy coordinated with 5 year plans with Citizen input through Project Area Committees (whether required by eminent domain or not)

1C. Proactive Design Review Guidelines for Buildings & Streetscape

- Redwood City may provide a good Bay Area Example with their Downtown Precise Plan (ABAG)
- <http://www.redwoodcity.org/cds/planning/precise/preciseplan.html>
- AIA confirms willingness to participate (with lead time for time-off coordination)
- Areas to address:
 - Large monolithic structures are a major source of objection to density

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- Proactive guidelines important to all parties to reduce disruption at the end of the process
- Needs to address major areas of concern
- Importance of transition from high density to lower densities area and looking at building elevations from all four sides in transition areas
- Flexible ground floor story
- Incorporating solar power to create more renewable electric capacity on the grid, especially as electric cars and transit become more prevalent.
- Aesthetic, livable, vibrant
 - Recommendation: Oakland Planning Needs to create a process to review and update existing HD DR guidelines, similar to the process convened in 2005 for design review guidelines for 1 and 2 family residences. Get examples of guidelines from other cities that work well, e.g., Portland, Vancouver

1D. Financing and Public Amenities to support a positive transportation hierarchy, and affordable access

- Some aspects are within the City of Oakland's control such as streetscapes, bike racks and paths and street furniture.
- Improve Mechanisms for funding within city
- "Improvement Agreements" and
- "Development Impact Fees"
- Land Value Premiums from Density and Transit Proximity may help fund above items
- Redevelopment funds where appropriate
- Coordinate with outside funding sources such as MTC
- Create a vision
- Create a set of standards for streetscape furniture etc consistent with streetscape plan and with cohesive appearance
- Create examples of infrastructure we'd like to see that could be included in improvement agreements. Bus loading stations, bike racks, benches, electric car charging stations (doubles effective range of electric cars) self charging street lights with vertical turbines, street light timer/dimmers for dawn and dusk, potential for turbines in parks.

Insert chart with Example Transportation-Land Use Hierarchy below

- Walking- Facilitated by development with "access by proximity" in urban villages, Community Oriented Development (COD), putting jobs and shopping near home, with high diversity of use. Big health benefits.
- Bicycling
- Electric Scooters, and Carts- Facilitated by development with access by proximity in Urban Villages, COD
- Bus Rapid Transit (BRT) - high density along linear "centers" -high rider ship and high density complement each other over time.
- Mass Transit- facilitated by Transit Oriented Development (TOD), efficient public transportation between high density nodes, that is not necessarily high diversity.
- Electric Cars- a more efficient way to use the existing road network. Limited range implies shorter trips which is a good thing. Range can be doubled by infrastructure that includes charging stations.
- Plug in hybrids that have an *electric drive train*, with a fueled generator to extend range.
- Plug in hybrids that have a *fuel drive train*, with batteries and electric assist motors.
- Alternative Fuels Vehicles, Hybrids.

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- Petroleum Fueled Cars-least preferred option in terms of energy and petroleum independence

A Street Car named....

- Since the BART-AC Transit System leaves a gap in the need for local transit, within nodes, consider an Oakland City Run System Based on Street Cars
- Street cars are shown to have higher rider ship- thus higher revenue potential
- Land Values have shown to be increased significantly by street car installation.
- Evaluate if
 - private investment capturing land value premium could finance capital costs leveraging street car "charm", and
 - fares cover operating costs
- Oakland Street Car Branding, style, color, graphics etc
- Could be built in Oakland- jobs
- Evaluate Key Route System to see where it could be still feasible
- Bordeaux France provides example of street car implementation without overhead electric lines overcoming a frequent objection- electrical cables can safely be placed in street to avoid objection to overhead lines
- Can dedicated BRT lanes be a first step to street cars?

1E. Transfer of Development Rights (TDR)

- A means to conserve some areas (or discourage development) by transferring rights to more desirable location.
- The "de-development areas" would generally be those farthest from the centers and those preventing the restoration of important natural elements like creeks and those where expansion of community gardens, parks and sports areas are needed.
- Existing Oakland TDR Ordinance requires contiguous property
- In Redevelopment Areas TDR may be used in conjunction with or in place of eminent domain proceedings, for voluntary transfers
- Recommendation: Council to modify existing Oakland TDR ordinance changing contiguous requirement

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2. Promote Public Transit

Every public transport trip is book ended with pedestrian trips and many also include bicycling trips. Hence, efforts to promote public transit must also address walking and bicycling.

Just as the City of Oakland has Bicycle and Pedestrian Master Plans, Oakland also needs a citywide, long-range policy document for promoting public transit in Oakland over the next several decades. Such a plan would be included in the Land Use and Transportation Element as an amendment the Oakland General Plan to promote public transit alternatives to the private automobile. We encourage council to set a target of December 2008 for a Public Transit Master plan to be completed and to give staff a mandate to implement the plan as developed over the next decade.

The Bicycle Master Plan is scheduled to be completed December 2007. It focuses on building infrastructure to increase bicycling safety. We strongly recommend that council not only approve the plan but also give staff a mandate to build consensus and a vision for seeing the work through. In concert with the development of the Public Transit Master plan, staff should review the Pedestrian Master Plan and determine whether updates are in order.

Develop and Implement Public Transit Master Plan

Improving the coverage of and access to public transit supports the City's efforts to become more environmentally, economically, and socially sustainable. In developing a Public Transit Master Plan, Oakland should identify aggressive and realistic goals for increasing public transit in the context of high oil and gasoline prices. The primary goals are to substantially increase ridership thereby making Oakland much more resilient in the event of escalating oil prices and oil price shocks. Secondary goals should address coverage, access, social equity, and safety. Oakland's Public Transit Master Plan should have the following objectives:

1. Infrastructure — Develop the physical infrastructure for a comprehensive transit network that improves access and use throughout Oakland, supports the urban village model, and connects Oakland to neighboring cities.
2. Encouragement—Improve the use of transit through encouragement, education, and community outreach.
3. Coordination—Develop processes and outreach to coordinate Oakland transit efforts with regional transit agencies, such as the Metropolitan Transportation Commission (MTC), AC Transit, Bay Area Rapid Transit (BART), and the California High Speed Rail Authority.

To oversee the planning process, city staff needs to form a Citizens Advisory Committee (CAC) composed of citizens representing council districts and community-based organizations. Interested individuals would be welcome participate in the monthly meetings of the CAC. Staff might also consider expanding the charge of Oakland's Bicycle and Pedestrian Advisory Committee (BPAC) - a monthly meeting on the prioritization and implementation of bicycle and pedestrian projects - to include public transit as well.

Infrastructure

Oakland should do a thorough investigation of options for creating a comprehensive public transit infrastructure that provides sufficient options and access to citizens for commute, recreational, and utilitarian trips. This work would begin with an evaluation of the current public transit infrastructure and identification of gaps or poorly served areas given likely

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demographic changes in the next several decades and the plans of regional transportation agencies as well as the Bicycle and Pedestrian Master plans (see the section on Coordination).

As a key example and recommendation, Oakland should work with AC Transit, public transit entrepreneurs, and the public to investigate the development of a municipal streetcar system or if sufficient interest exists, an East Bay streetcar system. The precedent for such a system is the Key System, a privately owned company which provided mass transit in the cities of Oakland, Berkeley, Emeryville, Piedmont, San Leandro, Richmond, Albany and El Cerrito from 1903 until 1958. In 1960, its assets were sold to a newly formed public agency, AC Transit.

The Key System consisted of local streetcar and bus lines operating solely in the East Bay, and a network of commuter rail and bus lines connecting to San Francisco via ferries and tracks on the lower deck of the Bay Bridge. At its height in the 1940s, the Key System had over 66 miles of track that connected the communities of Richmond, Albany, Berkeley, Oakland, and San Leandro with each other and to San Francisco.

The Key System's commuter train system was dismantled in 1958 after years of declining ridership as well as the effort by National City Lines, a General Motors affiliate which bought the system in the late 1940s, to petition the public utility board to abandon the last rail lines. In 1949, a Federal Court convicted General Motors, Standard Oil of California, Firestone Tire and others of criminally conspiring to replace electric transportation with gasoline or diesel powered buses, and to monopolize the sale of buses and related products to local transit companies throughout the U.S. They were fined \$5,000. State planners anxious to embrace California's postwar love for the automobile also pushed to have the track across the Bay Bridge and street rights of way removed to increase highway and street capacity. Local governments in the East Bay attempted to purchase the Key System, but were unsuccessful.

Oakland should also consider the possibility of zero fare system. Zero-fare public transport services are fully funded by means other than collecting a fare from passengers. Such a system could be funded by national, regional or local government through taxation or by commercial sponsorship. While several mid-size European cities and many smaller towns around the world have converted their entire bus networks to zero-fare, zero fare shuttles (such as Emeryville's Emery Go-Round) and inner-city loops are much more common than city-wide systems.

An East Bay Streetcar system would be consistent with Policy T-5 of the Transportation element of Berkeley's General Plan which calls for Berkeley to support regional efforts to develop light rail or bus rapid transit service connecting East Bay cities.

Encouragement and Education

Oakland needs to do outreach and education to ensure that all city workers, citizens, workers, and students are aware of their public transit options. One way is to increase its efforts to work with MTC's 511.org program. Oakland should also identify opportunities to provide financial incentives to encourage city workers and others to use public transit.

Oakland needs an education and outreach program to help citizens understand the importance of using public transit and what choices are available to them. As part of such a campaign, for specific neighborhoods where many transit opportunities exist but there is still low public transit usage, Oakland might consider a program like TravelChoice, a grant funded program of the Transport and Land Use Coalition which educates and informs households on their specific

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public transportation options. Since this program is labor intensive, it could be a source of green jobs but should be targeted to specific neighborhoods with the greatest opportunities.

The Public Transit Master Plan should consider options for Universal Transit Access (UTA) in Oakland, which would include programs to give free or discounted transit passes for city employees, as well as low income and public housing residents. Oakland should work with large employers and schools to join the program. Participation could be a requirement for new development. Policy T-3 of the Transportation Element of Berkeley's General Plan (See Appendix) calls for the city to work with transit agencies to establish a citywide or regional "Eco-Pass" program that would provide free transit passes to city employees, requires participation by new businesses with over 50 employees, and encourages existing businesses to join the program. The Policy also calls for Berkeley to consider a Citywide Transit pass for citizens to be funded by a tax that would allow pass holders free access to AC Transit and BART.

Another way to encourage workers to use public transport is to give them a stipend. City of Pleasanton employees get \$2 per day if they take BART, Altamont Commuter Express, carpool, bike or walk to and from work. The city also offers a public transit subsidy, monthly drawings for people who use alternative such modes of transportation and a commuter of the year prize.

Coordination

The City of Oakland should set up the processes and outreach to collaborate with regional transit agencies and neighboring cities such as Berkeley and Emeryville to expand public transit. There are a number of existing initiatives that in the East Bay that Oakland should coordinate with including: AC Transit's Bus Rapid Transit, BART's transit village development, MTC's 511.org program, and the California High Speed Rail Authority.

Transit & Infrastructure Coordination Recommendations

The city may act in an advocacy or coordination role with agencies such as BART, AC Transit, CALTRANS or others.

- ✓ *Weigh-in with State in an advocacy role about how Prop 1 bonds funds will be directed to either encourage sprawl or encourage efficient transit. (i.e.. Fourth Bore)*

Specific Regional Coordination Areas:

- ❖ Advocate Better "one fare" system
- ❖ Advocate infrastructure for bus loading stations
- ❖ Advocate AC Transit provide the "ribs" that feed into the "spine" of BRT and BART.
- ❖ Advocate AC Transit provide shuttle type services within activity nodes (urban villages) and to BART using excess BART parking at night where feasible
- ❖ Coordinate Transit Plans with City Infrastructure Plans
- ❖ Better Coordination between Regional Transit Agencies and Oakland Land Use Planning Efforts- mentioned by AC Transit and BART
 - Coordination on Priority Traffic Signaling for AC Transit could increase service by 1/3.
 - Potential for Joint Powers Authority to streamline Transit Village development

 - Designate specific transit coordination responsibilities within Oakland Planning Staff
 - Coordination of Land Use and Infrastructure with AC Transit and BART future Plans

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ABAG coordination Recommendations

- ❖ Fully Engage in FOCUS Program to identify Priority Development Areas
- ❖ Examine options for more focused nodes
- ❖ Leverage MTC involvement for funding
- ❖ Look at both priority development areas and *priority conservation areas*
- ❖ Potential to use City TDR as a tool for the conservation side of Regional Program

Some Specific Geographic Coordination Areas, for AC Transit and BART (Insert graphics for each proposed BRT location)

BRT Coordination

- ❖ Telegraph at 49th
- ❖ Telegraph at 31st
- ❖ International at 34th - Current

Respond to AC Transit Initial Thoughts for Other Transit Priority Locations

- ❖ 20th Street between SP and Harrison (where AC just spent \$4 million to fix the street between Telegraph and Broadway)
- ❖ Broadway between 2nd and Grand
- ❖ 11/12th between MLK and Oak
- ❖ 8th OR 7th between Oak and MLK
- ❖ W Grand between Toll Plaza and SP Avenue

Coordinate with BART Regional Rail and Transit Village Projects in Oakland

Short Term

- ❖ Corridor Preservation – Oakland Subdivision
- ❖ Increase frequency of Capitol Corridor
- ❖ Port of Oakland Intermodal Facility and 7th Street Grade Separation

Medium and Long Term

- ❖ BART implements Metro vision and 30-year CIP
- ❖ Fourth Track in Downtown Oakland
- ❖ West Oakland Capitol Corridor Station
- ❖ Potential new Transbay Rail / BART Crossing with HSR station at West Oakland BART and train yard in Oakland

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BART Transit Village Sites (format table and insert graphics)

| Station | Status | Development Status | Project Value |
|-------------------------|----------------------|---|---------------------------|
| Fruitvale (Phase I) | Completed | 47 rental units, 135,000 sf (37,000 retail, 27,000 office, 71,000 public) | \$100 M |
| Fruitvale (Phase II) | Approved | 278-425 units | \$130-190 M |
| MacArthur | Negotiations CEQA | 675 units, 34,000 sf retail, 5,000 sf community space | \$350 M |
| West Oakland | Negotiations | 1. West Oakland Alliance 2. McGrath Properties | \$73 M (both projects) |
| Coliseum | Negotiations | Oakland Economic Development Corporation and MacFarlane Partners | \$341 M (BART land) |

Every public transport trip starts and ends with a pedestrian trip and many also include bicycling trips. Hence, efforts to improve public transit in Oakland should be coordinated with the Bicycle and Pedestrian Master Plans (see next section).

Implement the Pedestrian and Bicycle Master Plans

Since all public transit trips include walking and many in Oakland include bicycling, promoting public transit is synergistic with promoting and improving safety for pedestrians and bicyclists. The Land Use and Transportation Element of the Oakland General Plan have both Pedestrian and Bicycle Master Plans to address this need.

The Pedestrian Master Plan promotes pedestrian safety and access to help ensure that Oakland is a safe, convenient, and attractive place to walk. It establishes a Pedestrian Route Network emphasizing safe routes to school and connections to transit. The routes include streets, walkways, and trails that connect schools, libraries, parks, neighborhoods, and commercial districts throughout the City. It identifies priority street segments along these routes for targeted improvements over the next twenty years. The plan also identifies new pedestrian design elements to promote pedestrian safety and access throughout the City. In concert with the development of the Public Transit Master plan, staff should review the Pedestrian Master Plan and determine whether updates are in order.

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Oakland is updating its Bicycle Master Plan which was originally adopted in 1999. Scheduled for completion in December 2007, the updated plan contains specific projects and policies to increase bicycling throughout Oakland. This effort integrates Oakland's bike plan with bike plans of the San Francisco Bay Area region, Alameda county and neighboring communities. The resulting plan will guide the implementation of future projects and ensure Oakland's competitiveness for funding from bicycle grant programs.

As noted in the draft Bicycle Master Plan:

In the United States, 40% of all trips are less than two miles in length (Federal Highway Administration 1999). In Oakland, 85% of residents live within two miles of a BART station. This two-mile distance equates to an easy 12-minute bicycle ride. Forty percent of American adults identified that they would sometimes commute or commute more often by bicycle if there were safe bikeways serving their trips (Parkwood Research Associates 1995). As the population of Oakland and the Bay Area continues to grow, the transportation system faces increasing demands on its crowded infrastructure. Compared to automobiles, bicycles are a very efficient use of roadway capacity and parking space. Bicycling is the most energy efficient form of transportation and it has no emissions. In Oakland, transportation is responsible for 47% of the city's greenhouse gas emissions (ICLEI 2006, p. 7). The use of bicycles for short trips reduces the number of short trips by automobile. These are high-polluting trips because of the car's cold start and the associated inefficient operation of the engine's catalytic converter. In fact, up to 70% of the pollution from a ten-mile car trip is generated in the first mile because of the cold start. By extending human-powered travel beyond walking distance, bicycles are especially effective for linking neighborhoods to major transit stations and thereby eliminating short, high polluting car trips.

Of the 24 California cities with populations over 150,000, Oakland had the third highest cycling rate (tied with Anaheim at 1.2%), following San Francisco (2.0%) and Sacramento (1.4%). At a finer level of detail, cycling rates vary significantly between census tracts in Oakland. Some neighborhoods have cycling rates over 5% while other areas report no residents cycling to work as their primary transportation mode.

The focus of the Bicycle Master Plan is the basics: infrastructure to make bicycling in Oakland safer and easier such as more bike lanes, more and better way-finding signage, more and better bike parking. One of the aims is addressing bicycle safety and access in the design and maintenance of all streets." The intent is to institutionalize the bike aspect as part of how the City works and makes decisions. There is also a significant need for more education and enforcement, especially as Oakland continues to have more bicyclists. While Transportation Services will lead the building the infrastructure, it is crucial that other agencies within the City contribute to implementing and being active with the Bicycle Master Plan. We strongly recommend that council not only approve the plan but also give staff a mandate to build consensus and a vision for seeing the work through.

3. Encourage Transport Sharing

- a) Support expanding car sharing, beginning with city staff and car sharing parking place management. Use car share services in lieu of city vehicles.
- b) Support dynamic ride sharing with online, telephone, and mobile phone access
- c) Expand carpooling – incentives, adding online and telephone support infrastructure, organization and coordination.

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d) Bike sharing

The City of Oakland should encourage sharing of cars, rides, and even bikes. As an initial step, Oakland could follow Berkeley's lead in expanding car sharing and encouraging employees to use car sharing services. The city conducted a pilot program with City CarShare beginning in the fall of 2006.

The City of Berkeley's Measure G implementation program is considering a goal of Universal Car Sharing such that car share vehicles are accessible throughout the city with the possible exception of the Berkeley Hills. As a first step, they are working with car share companies (e.g., City Car Share, FlexCar, and ZipCar) to increase the number of car share vehicles in Berkeley. In exchange for putting car share vehicles in less heavily trafficked areas, the City is dedicating some parking spots in high traffic areas that are for city vehicles to car share vehicles. In turn, the city is also encouraging city employees to use car share vehicles for city business and has accounts for this purpose with car share companies.

While Oakland goes through the time consuming process of improving public transit and shifting development to urban villages, Oakland should in the meantime encourage and collaborate with efforts to increase car pooling and dynamic ride sharing in the region. Carpooling is the shared use of a car for commuting to work, often by people who each have a car but travel together to save costs and/or in the interest of other socio-environmental benefits. While several online car pooling sites serve Oakland (e.g., erideshare.com and www.carpoolworld.com), MTC's 511 Rideshare program has by far the best service. Dynamic ride sharing systems allow people to make one-time ride matches close to their departure time using online and/or telephone systems. While many ride sharing systems have been tried, none have reached critical mass in the United States. In Europe, the Mitfahrzentrale has been successfully operating for years (www.mitfahrzentrale.de).

Oakland could help increase rates of carpooling by offering incentives for workers to carpool. In May 2006, MTC started a \$50,000 incentive program that gave new carpoolers as much as \$100 for gas or groceries. The City of Pleasanton offers employees a \$2 per day bump in their paycheck if they take BART, Altamont Commuter Express, carpool, bike or walk to and from work. The city also offers a public transit subsidy, monthly drawings for people who use alternative such modes of transportation and a commuter of the year prize.

It is anticipated that such efforts may to some extent undermine public transit by making it less expensive to drive. We anticipate, however, that the net benefit will be positive with respect to reduction of oil consumption and that the recommended improvements in public transit will have much greater impact on public transit usage than increased car pooling and ride sharing.

An even better option for city workers than carpooling, both from an oil reduction and health standpoint would be to increase the use of bicycles, both for commuting and short work-related trips. To help people access bicycles, Oakland needs a bicycle rental business, especially one that could serve the Bay Trail and the new improvements around Lake Merritt. As a step toward bike sharing, Oakland may be ready for a "bike pool," parallel to the City's car pool, that would encourage employees to use bicycles for city business (where practical). In addition, the city should be sure that future land use plans facilitate safe and expedient bicycle travel.

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4. Disincentives for Private Autos (Shannon will provide update during meeting)

1. Support existing initiatives such as regional congestion charging
2. Increase the cost of driving
 - a. Local carbon or gas tax (Berkeley, <http://www.ilsr.org/ecotax/greentax.html>)
 - b. Higher parking fees (MTC 's parking toolbox in Great Communities Collaborative)
3. Less Parking in new developments funding public transportation
4. Reduce city-subsidized parking and car allowances

5. Promote Less Oil Intensive Transport

- a) Driver education on vehicle maintenance to improve vehicle efficiency
- b) Enforce existing traffic laws (e.g., speed limits)
- c) Enforce anti-idling laws
- d) City EV procurement and leasing
- e) Plug-in hybrid purchase and infrastructure development
- f) Promote alternative fuels

While the city of Oakland does not have regulatory authority over the efficiency of the vehicle fleet, there are a number of steps that the city can take to promote less oil-intensive vehicle choices and use. These range from driver education to enforcement of existing laws to programs to induce the purchase and use of clean vehicles and fuels.

Proper vehicle maintenance can have a significant effect on vehicle efficiency. Improper tire inflation increases a tire's rolling resistance and, therefore, reduces a vehicle's efficiency.¹ Vehicle mileage can be reduced up to 0.4% for every 1 psi reduction in tire inflation (on all four tires). Keeping a vehicle's engine properly tuned and replacing air filters can provide even larger fuel economy benefits.² A public education program can help to encourage vehicle owners to properly maintain a vehicle.

The city can also reduce transportation oil use by enforcing existing laws. These include speed limits and anti-idling regulations. Vehicle fuel economy declines rapidly at speeds over 60 miles per hour, therefore, a focus on enforcement of the speed limit on the city's major streets and highways could result in an improvement in fuel economy.³ Five to fifteen percent of a vehicle's CO₂ emissions, which correlate directly with fuel consumption, occur at idle.⁴

Finally, the city can provide incentives and services to support greater use of electrified forms of transport. This includes vehicle choice in city vehicle procurement programs as well as development of infrastructure to support electric vehicles. An increased effort by the city to develop infrastructure to support electric vehicles will require coordination with Pacific Gas and Electric as well as consideration for inclusion into future land use development plans.

We also recommend that the city consider judicious support of increased use of alternative fuels. We would like to make a cautionary note regarding biofuels. It is crucial to evaluate biofuels in light of the conflicting evidence on the energy benefits of biofuels as well as the increasing amount of information emerging on the competition between crops for fuels versus

¹ NAS, 2007, *Tire and Passenger Vehicle Fuel Economy: Informing Consumers, Improving Performance*, Washington DC: National Academy Press.

² <http://www.fueleconomy.gov/feg/maintain.shtml>

³ <http://www.fueleconomy.gov/feg/driveHabits.shtml>

⁴ An, F., D. Friedman, and M. Ross. 2002. Near-Term Fuel Economy Potential for Light-Duty Trucks. Warrendale, PA: Society of Automotive Engineers, 2002-01-1900. June.

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food. In addition, the environmental and ecological damage that can result from biofuel crop production poses significant concerns. Therefore, we encourage the city to focus on biofuels derived from reclaimed waste oil (i.e., biodiesel) rather than virgin crops.

6. A model city fleet

- a) Reduce the size of the city fleet through partnerships with carshare groups
- b) Increase biodiesel use in city diesel vehicles
- c) Require best in class purchases, with priority given to electric and plug-in hybrid electric vehicles as appropriate

One element of Oakland's transportation footprint that the city has direct control over is its own vehicle fleet. The city currently maintains a fleet of just over 1700 vehicles. Of these, 45% are cars, 20% are light trucks and vans, and 15% are heavy trucks and construction equipment. The city's fleet vehicles are driven approximately 8.8 million miles per year.⁵

The city has launched a pilot program with City CarShare. The program has just over 30 employees currently enrolled and the city expects that this will increase as the size of the fleet is reduced through the removal of underutilized fleet vehicles.⁶ We encourage the city to explore options to expand this program further as discussed in item #3.

The city could reduce oil usage in its heavy trucks and construction equipment through increased use of biodiesel. We encourage the city to utilize biodiesel from reclaimed waste oil for this use, as discussed in item #5. In addition, we encourage the city to give preference to using biodiesel that is locally produced.

When the city is purchasing new fleet vehicles, the city should employ a best in class fuel economy rule, where feasible. There is significant variation in the fuel economies of vehicles available in each class. For example, the highway fuel economy rating for a midsize car ranges from 33 miles per gallon down to 16 miles per gallon (excluding hybrids). The range for SUVs is from 28 miles per gallon down to 13 miles per gallon (excluding hybrids).⁷ Using best in class purchasing rules could reduce fuel use significantly and save the city money.

⁵ Data from memo from Public Works Agency to the Office of the City Administrator, "Report and Action on Fleet Usage, City CarShare Pilot Program, Commute options, Vehicle Locators Using Satellite Technology, and Fleet Replacement Needs, November 13, 2007.

⁶ *ibid.*

⁷ Data from EPA: www.fueleconomy.gov

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Ports and Consumer Goods

Overview of the Port of Oakland

The Port of Oakland is a major economic feature of the city of Oakland. The Port directly provides 60,000 jobs locally and 700,000 in the region. The Port of Oakland supports billions of dollars in economic activity each year, and indirectly generates significant state and local tax revenues for the City of Oakland.⁸ The Port of Oakland has 8 marine terminals, (between 50 to 150 acres in size), 20 berths and 2 railroads leading up to it. Oakland brings in 8% of California's cargo imports while Long Beach and Los Angeles bring in the majority at 89% (the remaining 3% come from other CA ports).¹

- *NOTE: Potential for localization strategies for manufacture or materials reprocessing. One way to reduce the oil use is to modify the current "model"-globalization uses oil localization uses less there is still economic growth.*

Key structural, political, and economic factors

Competition with other ports is a major consideration for any decision: Competition between the Port of Oakland and other major ports facing the Pacific (such as Los Angeles/Long Beach, Portland, and Seattle) is of major strategic importance. Port officials and operators consistently raise concerns about competition in response to proposed environmental policy changes related to fossil fuel consumption and air quality. They argue that regulations and policy changes should be enforced nationally and internationally to avoid adversely affecting the economic competitiveness of the Port of Oakland. Otherwise, they argue, higher costs at the Port of Oakland will cause companies to re-direct their cargo down south to LA or up north to Seattle, taking business away from the Port of Oakland.

- *NOTE: Cite the BMP and initiatives (listed at end) from the other ports as motivator. Oakland Port will not be 'forging' new territory they are just catching up.*

The Port is mostly a landlord, not an actual operator of goods movement activities:

While the vast majority of activity on the Port involves the movement of people (aviation operations) and goods (maritime and aviation operations), those activities are for the most part carried out by "tenants" of the Port of Oakland, which acts primarily as "landlord." While it is possible for the Port to exert some influence over how those tenants operate, the influence is not nearly as direct as many may think. The Port can establish conditions for leasing Port facilities, but is not directly in charge of the daily operations that take place on the land. Private companies set their own standards of operations for their ships, trucks or trains within the guidelines of state and national regulations. The Port of Oakland provides the facilities and equipment for the Marine Terminal Operators to maintain. It is important to acknowledge the complexity of the landlord/tenant reality while at the same time not allowing that arrangement to become an excuse for failures to act on systemic problems, failures to plan adequately for the future, or failures to act on behalf of other major Port stakeholders (such as local community residents and the workforce at the Port).

NOTES:

- *Conditions in leases per LA model.*
- *Education/Workshops for tenants paid for by Port revenue (public goods funds).*

⁸ Meeting July 30, 2007. Port of Oakland Meeting at the Port of Oakland Offices.

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- *As landlord are there incentives for local economy building businesses.*

Controversy around the Port's fossil fuel consumption is largely centered on local/regional air quality and public health impacts, not economic vulnerabilities or global climate change: It is important to note that the problem most heavily associated with oil consumption at the Port is negative health impacts from oil-based air pollution. This has resulted in problem statements and solutions that are primarily geared toward mitigating health impacts. For instance, the Port of Oakland is implementing new "cold-ironing" technology that relies on electricity generated from natural gas, as a way to reduce local combustion of bunker and diesel fuels. Switching to natural gas is more effective as a public health solution, and less effective in addressing "peak oil/natural gas" and global climate change problems. Studies conducted related to oil consumption at the Port are more geared toward measuring health risks from pollution, and are less geared toward establishing baselines of fossil fuel consumption or greenhouse gas emissions.

- *NOTE: Potential for using community health impacts as a lever.*

The Port of Oakland is in the midst of major growth and expansion: Several years ago, the Port of Oakland initiated a major, multi-year expansion plan which is still underway. Container traffic at the Port is expected to increase by huge percentages in the decades to come.

- *NOTE: The underlying assumption is that globalization is going to grow. An alternative approach is building local economy.*

A unique labor and community agreement exists to govern the Port's expansion: When the Port's expansion plan was first put in place, it was the subject of a major negotiation between the Port, labor unions, and community groups. The result of that negotiation was the establishment of the Maritime and Aviation Project Labor Agreement, or MAPLA. This agreement ensures that the expansion of the Port results in some benefits for community stakeholders and labor unions.

- *NOTE: Potential that local labor groups would want to have manufacturing jobs grow in the region through local economy models.*

Potential Recommendations

- Implement Environmental Management System
- Voluntary Tenant Environmental Awareness Training
- Create Green Task Force
- Goal: Expand percentage of cargo transported by rail with % goal.
- Electrification of Port Cranes
- Some tenants to install Electric of Gates, Relocate Gates, and Extend Gate Hours – to reduce truck waiting/idling time
- Replace diesel powered fork lifts with either propane or electric
- New leases with tenants must include green agenda
- Green Flag Program -
 - Voluntary (with incentives such as lower dockage fees) programs requiring ships to slow to 12 knots at distance of 20 miles from shore. Traveling at lower speeds reduces emissions. To date, 60% of ships have joined program.
 - Incentives for ships that use low-sulfur diesel

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- Cold Ironing – Goal of providing shore-side electrical power for all terminals
- Comprehensive Air Quality Plan
 - Retrofit Heavy Duty Vehicles with Diesel Oxidation Catalysts (DOCs) or Diesel Particulate Filters (DPFs)
 - Beginning in 2008 all non-maintenance dredging must be conducted with electric equipment
 - Yard Modernization – Retrofit yard tractors to meet emissions standards; container handling equipment equipped with exhaust controls
 - Modernization of PHL locomotives – use of LNG switchers, idle limiting devices, cleaner fuel
 - Truck traffic - considering incentives for commercial truck owners to upgrade truck to more modern clean fuel / fuel efficient trucks; institute measures to reduce idling time
- Institute 'green building' in all new construction and retrofits (tenant improvements?)
 - Alternative Marine Power (AMP):

The major AMP technique is 'cold-ironing', which is the practice of plugging into an electrical source while docked. The South Coast Air Quality Management District estimates this practice can reduce pollution by 2/3 if source of electricity is coal-fired plant, and up to 100% if renewable source is used.
 - Switch to cleaner fuels:
 - Low-sulfur fuels: Cruise ships – Seattle and San Francisco
 - Recently announced plan by the International Marine Organization (IMO) sets international standards for reductions in nitrous and sulfur emissions
 - Biodiesel: NOAA Great Lakes research initiative
 - Natural gas: Long Beach – EPA grant to retrofit for yard hostlers (small trucks at cargo terminal)
 - Upgrade/Retrofit Equipment:

A wide variety of engines are used at dockside to unload and handle containers. Replace with electric, low emission engines; equip with diesel oxidation catalysts, idle limiters:

 - Yard equipment: cranes, forklifts (Los Angeles, Long Beach, Seattle)
 - Short-haul trucks (Long Beach: diesel oxidation catalysts)
 - Locomotives (Long Beach: idle limiters)
 - Miscellaneous: Infrastructure changes:
 - Greater use of rail, bring tracks closer to dock (New York/New Jersey)
 - Modify gates (computerize, switch to electric) to reduce fuel use and truck waiting time (New York/New Jersey)

Consumer Goods

The Task Force came to the realization early in its deliberations that Food and Materials are two important areas of dependency and vulnerability for Oakland with regard to petroleum. However, due to time and personnel limitations, the Task Force realized it would be impossible to focus as much attention on these subjects as on transportation and related issues such as land use, which together account for the substantial majority of Oakland's oil consumption. Therefore, we decided to include the following general overview, with the recommendation that further studies of economic and societal vulnerability from future oil supply problems for food

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and materials, and more detailed suggestions for reducing those vulnerabilities, be pursued further at a later date.

Food

Conventional industrial agriculture is entirely dependent on fossil fuels. Artificial ammonia-based nitrogenous fertilizers use natural gas and atmospheric nitrogen as raw materials. Much of the world's cropland has been so chemically exhausted, its topsoil so weathered and destroyed that, without these artificial fertilizers (or extensive work to rebuild the topsoil), and it cannot produce crops in the volume or at the pace that the world's population now requires. The use of farm machinery impelled by internal-combustion engines, which run on petroleum products, has freed up millions of acres of cropland from the need to grow feed for draft animals; those acres now grow food for the burgeoning human population. Without oil, farming may again require animal power, and traction animals will need to be fed. Farms always attract pests; however, the growing of monocrops, which is made economically necessary by mechanization, attracts huge numbers of insect pests. Oil provides the feedstock for making the cheap pesticides used to control these swarms of pests and to maintain crop yields.

As a result of all of this, approximately ten calories of fossil fuel energy are currently needed to produce one calorie of food energy in conventional American agriculture. (Pimentel...)

With the global proliferation of the industrial-chemical agriculture system, the products of that system are now also traded globally, enabling regions to support human populations larger than local resources alone could support. Those systems of global distribution and trade also rely on oil. Within the US, the mean distance for food transport is now estimated at 1,546 miles, though this distance varies greatly depending on the food item—233 miles is the average for pumpkins, 2095 miles for broccoli (Pirog et al 2001).

Oakland's situation is typical of that of modern cities: most food is imported from elsewhere, and most of that food is grown using prevailing fossil-fuel intensive methods.

Again, this implies a critical vulnerability for the people of Oakland. The Task Force therefore strongly recommends (1) maximizing local production of food in order to reduce the vulnerability implied by a fossil-fuel based food delivery system; and (2) promoting forms of agriculture that rely on fewer fossil-fuel inputs. While efforts along these lines require support at the Federal and State levels, some local polices could be extremely helpful:

- Promote Farmers' Markets and CSAs (community-supported agriculture) in any way possible.
- Promote gardening, including community gardens, rooftop gardens, and school gardens
- Favor local and organic production over conventional food for school food programs and other purposes that are under the control or influence of the City government.

Oakland is already pursuing such efforts as a result of Resolution #79680 C.M.S., (December 2005), in which the City Council authorized the Mayor's Office of Sustainability to develop an Oakland food policy and to plan for thirty percent local area food production. As a consequence of that Resolution, UC Berkeley graduate students Serena Unger and Heather Wooten conducted the Oakland Food System Assessment, which is available online at <http://oaklandfoodsystem.pbwiki.com/>.

Since these efforts were initiated in response to concerns somewhat different from those motivating the work of this Task Force, further study is warranted to determine whether

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additional strategies are required to ensure food security for the citizens of Oakland in an increasingly oil-constrained world.

Plastics and Chemicals

About 5% of oil consumed in the US annually (about 1 million barrels per day) goes into the making of plastics and chemicals. While this is a small proportion of the total oil consumed, it is crucial to the American economy.

Petrochemicals are made by “cracking” oil, a process of breaking hydrocarbon molecules apart with intense heat and sometimes a chemical catalyst, and are the raw materials for an uncountable number of materials both frivolous and essential. Some of the more common petrochemical building blocks of our industrial world are ethylene, propylene, and butadiene. Further processing of just these three chemicals produces products as common, diverse, and important as disinfectants, solvents, antifreezes, coolants, lubricants, heat transfer fluids, and of course plastics.

One of the most important petrochemicals, ethylene, can polymerize into polyethylene, a plastic used to make everything from toys to food containers and furniture. Ethylene can also react with chlorine to produce ethylene chloride, which can then be used to produce vinyl chloride, or its polymerized form, polyvinyl chloride (commonly known as PVC or vinyl), another important plastic. PVC is used in everything from building construction materials to clothing to toys.

Clearly, future oil supply problems will affect the entire chain of industrial products that incorporate these chemicals. The citizens and economy of Oakland will obviously be impacted, and it is difficult to imagine a scenario in which that impact could be entirely eliminated absent policies and practices implemented globally and nationally. Nevertheless, there are things that Oakland could do to reduce its vulnerability to these economic consequences of oil depletion.

Needed policies and practices must focus on two strategies: (1) identifying alternative materials made from renewable sources to replace petrochemicals; and (2) devising strategies to reduce the amount of materials required and consumed.

Plastics and other products now composed of petrochemicals can be made from corn, hemp, and other crops. A few companies such as NatureWorks (a division of Cargill) and Dow Chemical are actively pursuing such alternatives.

From the standpoint of consumers, it would be a tragic mistake for the industry to postpone making the lengthy and costly transition to alternative feedstocks until forced to do so by rising oil prices and shortages. In that case, entire supply chains might be disrupted, causing costs for products of all kinds to rise precipitously. Instead, the shift must be proactive, encouraged through corporate and government policy. As one example: last year, WalMart announced its intention to use biorenewable materials for all of its packaging.

Research into and development of alternative materials could provide Oakland with an opportunity for jobs growth.

The replacement of petrochemical-based materials with renewable alternatives is not without problems, however. To replace the entire stream of plastics and other oil-based materials in the US economy with crop-based materials would further strain an agricultural system already stressed by the increasing mandate to produce biofuels in addition to food. Moreover, many

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chemical processes that incorporate renewable feedstocks are energy-intensive, which means that the expansion of those processes would entail increased energy consumption.

Therefore the second strategy, finding ways to use less, will be of even greater importance in the long run. In the opinion of the Task Force, the banning of the use of plastic bags in Oakland represents a good first step in this direction.

Road Materials

One of the two most important road-paving materials is asphalt (the other is cement, a natural gas dependent material), which is a low-grade component of petroleum. As higher grades of oil will likely tend to be used preferentially during the coming years, it is unlikely that asphalt prices will rise as high or as quickly as those for light-sweet crude. Nevertheless, prices for conventional road materials will escalate substantially, making road building and road repairs more problematic as time goes on.

The following are recent figures for oil-based materials usage for road building and repairs in Oakland, as supplied by the Public Works Agency.

Oil Based Materials Usage, in Tons, For The City of Oakland, 2002 – 2007

| Description | FY 02-03 | FY 03-04 | FY 04-05 | FY 05-06 | FY 06-07 | TOTAL |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| Asphalt Concrete (AC)- CIP Overlays | 30,098 | 17,165 | 42,377 | 10,205 | 14,032 | 113,877 |
| AC for Pothole crew | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 | 12,000 |
| AC for Base Repair/Speed Bumps | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Rubberized AC | 24,869 | 17,388 | 12,850 | 0 | 0 | 55,107 |
| Cold Patch AC | 112 | 90 | 90 | 135 | 158 | 5858 |
| Slurry Seal | 127 | 180 | 0 | 0 | 0 | 307 |
| Parks, Streetscape, and Sewer | 6709 | 8174 | 6508 | 6242 | 6,000 | 33,633 |
| TOTAL | 69,315 | 50,397 | 69,225 | 23,982 | 27,590 | 240,509 |

NOTE: In FY04-05, the Public Works Agency began the Street Resurfacing ACTIA Project, which accounts for the higher AC Overlay quantities.

The Task Force recommends that the City of Oakland investigate alternative materials for these purposes. One promising possibility is a material made from clay mixed with alkaline chemicals, which is being used increasingly in Zambia and other African nations. According to one report, the new material, besides being environmentally friendly, is both cheaper and more durable than conventional asphalt. (see <http://allafrica.com/stories/200706220926.html>)

Implementation and Public Education

1. Create Office of Energy Sustainability
 - a. Manage oil independence and carbon emissions reduction efforts
 - b. Explore various options for funding oil independence initiatives including grants, selling offsets, taxes and fees, etc
 - c. Develop information system to monitor & model oil and energy consumption
2. "Your Choices Matter" Public awareness campaign
 - a. Web site and hot line
 - b. Outreach to stakeholder groups
 - c. Urban villages education and outreach
 - d. Open space neighborhood meetings
 - e. City staff awareness campaign
 - f. Outreach to large employers in Oakland to develop programs to reduce oil consumption
 1. Educate about/encourage flex time models and compressed work weeks
 2. Develop model programs for employers (e.g., model ordinances)
 3. Provide incentives for trip tracking and reduction
 4. Educate employers on opportunities for waste minimization, renewable energy use, clean fleet purchases, etc.

Break out box or addition to sections

Green Collar Jobs

- a. Work with Community Colleges
- b. Conversion of gas to electric vehicles

New Section without a title

1. CCA (*Dave will provide update*)
2. Contingency Planning (*Jim will update*)
 - a. Require contingency planning for oil price and availability shocks by new development, municipal and regional agencies, and large employers
 - b. Municipal contingency plan that addresses a 7 day fuel outage as well as a slow creep in prices

Take an active role in supporting national and state laws and regulations that will reduce oil consumption (e.g., feebates, zero-emission vehicles, climate change rules, carbon taxes, etc.)

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Appendix:

City of Berkeley-Policy T-3 Eco-Pass City Program

Increase transit use and reduce automobile traffic and congestion in Berkeley by creating an Eco-Pass program.

Action: A. Work with AC Transit, BART, neighboring jurisdictions, major employers, and neighboring transit districts to establish an "Eco-Pass" program for Berkeley employers that would allow pass holders free unlimited rides on AC Transit and/or BART. Once the program is established:

1. Provide Eco-Passes for all City employees.
2. Establish participation in the Eco-Pass program as a condition of approval for all new businesses with over 50 employees.
3. Encourage existing area employers, particularly major employers such as UC Berkeley, Berkeley Unified School District, Lawrence Berkeley National Laboratory, and Alta Bates Medical Center, to join the program.
4. Contact all employers with 50 or more employees to encourage their participation in Eco-Pass.
5. Work with the participating transit agencies to offer a neighborhood Eco-Pass, which would allow neighborhoods to participate in the program, similar to the Boulder, Colorado, Neighborhood Pass.
6. Consider creation of a Citywide Transit Pass for Berkeley residents financed by a tax that would allow pass holders free unlimited rides on AC Transit and/or BART.
7. As an interim measure, contact and encourage area employers to participate in the existing Commuter Check program. Maintain or increase existing transit subsidies for City employees and encourage other employers to maintain and increase existing transit subsidies.

City of Berkeley-Policy T-5 Light Rail/Bus Rapid Transit

Support regional efforts to develop light rail or bus rapid transit service connecting East Bay cities.

Actions: A. Locate light rail or bus rapid transit systems on the primary transit corridors identified on the Transit Network map.

B. Consider bus rapid transit, with bus priority signals and bus priority lanes on transit corridors, as an interim and low-cost alternative to a new light rail system.

C. Aggressively pursue regional funding sources with AC Transit and neighboring cities for a light rail or bus rapid transit system.

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D. Continue to work with AC Transit and regional transportation agencies to evaluate potential major public investment strategies and alternatives to improve transit services for Berkeley citizens, including light rail and bus rapid transit.

E. Work with local merchants to build support for a light rail system and bus rapid transit and minimize potential impacts to businesses from construction and loss of parking.

F. Investigate a low-cost open trolley service along major pedestrian and shopping corridors such as University, Shattuck, and Telegraph as an interim or permanent solution similar to the Santa Barbara waterfront trolley system.

G. Support AC Transit's Major Investment Study with its recommendations to achieve long-term rail on Telegraph Avenue. Advocate for extension of the recommendations to the foot of University Avenue and connection with service enhancements on San Pablo Avenue.

A note on the rebound effect

Policies that increase the efficiency of vehicles or other appliances are often criticized for being counter-productive because by decreasing the amount that it costs to operate a given item, people will use them more. This erodes the gains from efficiency. This is called the rebound or take-back effect. The rebound effect has been documented and quantified at the national and state level. For transportation, rebound is equivalent to the negative elasticity of vehicle miles traveled with respect to the price of gasoline per mile. Estimates of the rebound effect for transportation, based on national data, range from approximately 10% in the short run (on year) up to 20-30% over the long run (Greening et al.,). A recent analysis for California shows that the rebound effect is smaller in the state, ranging from 2.2% in the short run to approximately 11.3% over the long run (Small and Van Dender). Two reasons for a smaller rebound rate in California could include higher incomes and greater congestion, which increases the time cost of driving.

References

- Greening, LA, D. Greene, and C. Difiglio. 2000. Energy Efficiency and Consumption – The Rebound Effect – A Survey. *Energy Policy* 28: 389-401.
- Small, K. and K. Van Dender. 2005. ***A Study to Evaluate the Effect of Reduced Greenhouse Gas Emissions on Vehicle Miles Traveled. A report*** prepared for the State of California Air Resources Board, the California Environment Protection Agency, and the California Energy Commission.

Discussion on November 19, 2007, will also include the following article, which was posted on November 10, 2007, at [AlterNet.org](http://www.alternet.org). The original article can be viewed on-line at: <http://www.alternet.org/story/67478/>.



Health & Wellness



Biofuels Could Kill More People Than the Iraq War

By [George Monbiot, Monbiot.com](http://www.monbiot.com). Posted [November 10, 2007](#).

If the governments promoting biofuels do not reverse their policies, the humanitarian impact will be greater than that of the Iraq war.

It doesn't get madder than this. Swaziland is in the grip of a famine and receiving emergency food aid. Forty per cent of its people are facing acute food shortages. So what has the government decided to export? Biofuel made from one of its staple crops, cassava. The government has allocated several thousand hectares of farmland to ethanol production in the county of Lavumisa, which happens to be the place worst hit by drought. It would surely be quicker and more humane to refine the Swazi people and put them in our tanks. Doubtless a team of development consultants is already doing the sums.

This is one of many examples of a trade described last month by Jean Ziegler, the UN's special rapporteur, as "a crime against humanity." Ziegler took up the call first made by this column for a five-year moratorium on all government targets and incentives for biofuel: the trade should be frozen until second-generation fuels -- made from wood or straw or waste -- become commercially available. Otherwise the superior purchasing power of drivers in the rich world means that they will snatch food from people's mouths. Run your car on virgin biofuel and other people will starve.

Even the International Monetary Fund, always ready to immolate the poor on the altar of business, now warns that using food to produce biofuels "might further strain already tight supplies of arable land and water all over the world, thereby pushing food prices up even further." This week the UN Food and Agriculture Organisation will announce the lowest global food reserves in 25 years, threatening what it calls "a very

serious crisis." Even when the price of food was low, 850 million people went hungry because they could not afford to buy it. With every increment in the price of flour or grain, several million more are pushed below the breadline.

The cost of rice has risen by 20% over the past year, maize by 50%, wheat by 100%. Biofuels aren't entirely to blame -- by taking land out of food production they exacerbate the effects of bad harvests and rising demand -- but almost all the major agencies are now warning against expansion. And almost all the major governments are ignoring them.

They turn away because biofuels offer a means of avoiding hard political choices. They create the impression that governments can cut carbon emissions and -- as Ruth Kelly, the British transport secretary, announced last week -- keep expanding the transport networks. New figures show that British drivers pattered past the 500 billion kilometer mark for the first time last year. But it doesn't matter: we just have to change the fuel we use. No one has to be confronted. The demands of the motoring lobby and the business groups clamouring for new infrastructure can be met. The people being pushed off their land remain unheard.

In principle, burning biofuels merely releases the carbon they accumulated when they were growing. Even when you take into account the energy costs of harvesting, refining and transporting the fuel, they produce less net carbon than petroleum products. The law the British government passed a fortnight ago -- by 2010, 5% of our road transport fuel must come from crops -- will, it claims, save between 700,000 and 800,000 tonnes of carbon a year. It derives this figure by framing the question carefully. If you count only the immediate carbon costs of planting and processing biofuels, they appear to reduce greenhouse gases. When you look at the total impacts, you find that they cause more warming than petroleum.

A recent study by the Nobel laureate Paul Crutzen shows that the official estimates have ignored the contribution of nitrogen fertilisers. They generate a greenhouse gas -- nitrous oxide -- which is 296 times as powerful as CO₂. These emissions alone ensure that ethanol from maize causes between 0.9 and 1.5 times as much warming as petrol, while rapeseed oil (the source of over 80% of the world's biodiesel) generates 1-1.7 times the impact of diesel. This is before you account for the changes in land use.

A paper published in *Science* three months ago suggests that protecting uncultivated land saves, over 30 years, between two and nine times the carbon emissions you might avoid by ploughing it and planting biofuels(13). Last year the research group LMC International estimated that if the British and European target of a 5% contribution from biofuels were to be adopted by the rest of the world, the global acreage of cultivated land would expand by 15%. That means the end of most tropical forests. It might also cause runaway climate change.

The British government says it will strive to ensure that "only the most sustainable biofuels" will be used in the UK. It has no means of enforcing this aim -- it admits that if it tried to impose a binding standard it would break world trade rules. But even if "sustainability" could be enforced, what exactly does it mean? You could, for example, ban palm oil from new plantations. This is the most destructive kind of biofuel, driving deforestation in Malaysia and Indonesia. But the ban would change nothing. As Carl Bek-Nielsen, vice chairman of Malaysia's United Plantations Bhd, remarked, "even if it is another oil that goes into biodiesel, that other oil then needs to be replaced. Either way, there's going to be a vacuum and palm oil can fill that vacuum." The knock-on effects cause the destruction you are trying to avoid. The only sustainable biofuel is recycled waste oil, but the available volumes are tiny.

At this point the biofuels industry starts shouting "jatropha!" It is not yet a swear word, but it soon will be. Jatropha is a tough weed with oily seeds that grows in the tropics. This summer Bob Geldof, who never misses an opportunity to promote simplistic solutions to complex problems, arrived in Swaziland in the role of "special adviser" to a biofuels firm. Because it can grow on marginal land, jatropha, he claimed, is a "life-changing" plant, which will offer jobs, cash crops and economic power to African smallholders.

Yes, it can grow on poor land and be cultivated by smallholders. But it can also grow on fertile land and be cultivated by largeholders. If there is one blindingly obvious fact about biofuel it's that it is not a smallholder crop. It is an internationally-traded commodity which travels well and can be stored indefinitely, with no premium for local or organic produce. Already the Indian government is planning 14m hectares of jatropha plantations. In August the first riots took place among the peasant farmers being driven off the land to make way for them.

If the governments promoting biofuels do not reverse their policies, the humanitarian impact will be greater than that of the Iraq war. Millions will be displaced, hundreds of millions more could go hungry. This crime against humanity is a complex one, but that neither lessens nor excuses it. If people starve because of biofuels, Ruth Kelly and her peers will have killed them. Like all such crimes it is perpetrated by cowards, attacking the weak to avoid confronting the strong.

George Monbiot is the author of 'Poisoned Arrows' and 'No Man's Land' (Green Books). Read more of his writings at [Monbiot.com](http://www.monbiot.com). This article originally appeared in [the Guardian](#).

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[END OF AGENDA]