

Thursday, October 18, 2007

Regular 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 1, City Hall, One Frank H. Ogawa Plaza

AGENDA *

1. Roll Call and Establishment of Quorum.
2. Open Forum.
3. Approval of Draft Minutes of October 4, 2007 meeting. (A)
4. Discussion of Targets for Petroleum-Use Reduction. (I/A)
5. Discussion of Task Force Recommendations and the Final Action Plan Framework, Including its Format, Organization, Prioritization, and Content, and Development of Preamble/Introduction. (I/A)
6. Future Agenda Items. (A)
7. Announcements. (I)
8. 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, October 4, 2007, 6:00 pm to 9:00 pm
Hearing Room 1, City Hall, One Frank H. Ogawa Plaza

Members:

Jane Seleznow	District 1	Mike Petouhoff	At Large
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David Room	District 6	Alice Glasner	Public Works Legislative Analyst
Richard Register	District 7		

Task Force Members Present: Register, Kim, Lutz, Graham, Room, Shah, Petouhoff.

Task Force Members Absent (Excused): Bedsworth, Heinberg, Seleznow.

Staff Members Present: Alice Glasner, Public Works Committee Legislative Analyst.

AGENDA

1. Roll Call and Establishment of Quorum.
 - a. The meeting began at 6:20 p.m. and quorum was established.
2. Open Forum.
 - a. There were no speakers for Open Forum.
3. Approval of Draft Minutes of August 30, 2007 meeting.
 - a. TFM Room made a motion, seconded by TFM Graham, to approve the Minutes without change. They were approved unanimously.
4. Power Point Presentation: *Post Carbon Cities: Planning For Energy and Climate Uncertainty, Including Recommendations For Potential City Policies Related to Peak Oil*, by Daniel Lerch
 - a. Daniel Lerch is the Program Manager for the Post-Carbon Cities Program of the Post Carbon Institute. He has written a White Paper concerning peak oil for the regional government in the Portland Metro area
 - b. The problems that peak oil creates for local government, including energy and climate uncertainty
 - c. He mentioned two case studies for Portland and Sebastopol.
 - d. An example of short-term problems associated with oil prices: price of oil went up 5% last year but the price of asphalt went up two or three times, depending on location. For cities this affects paving and other projects.
 - e. One of the unforeseen effects of hurricane Katrina included the “knocking out” of motor fuel pipeline to North Carolina.
 - f. Few cities are looking at the effects of Peak Oil.
 - g. Sebastopol came up with numerous recommendations, such as these:
 - i. Establish a standing advisory committee
 - ii. Develop procedures for tracking energy use
 - iii. Prepare for long-term outages and emergencies
 - iv. Assess how energy price changes may change the availability of commuting employees
 - v. Encourage waste/ trash collection with non-fossil fuels.

- h. The Portland recommendations include some of the following:
 - i. Reduce total Oil and natural gas consumption by 50% over the next 25 years (from Oil Depletion Protocol).
 - ii. Inform citizens about Peak Oil and foster community and community-based solutions.
 - iii. Engage business, government, and community leaders to initiate planning and policy change
 - iv. Support land use patterns that reduce transportation needs.
 - i. Daniel's conclusions are:
 - i. Educate people about the challenges, uncertainties, needs, opportunities.
 - ii. Have the complex conversations about land use, relocalization, sustainability approaches.
 - iii. Political piece: inspire stakeholders, engage, lead, follow.
 - j. Post-Carbon Guidebook has numerous case studies and recommendations.
 - k. There are other good sources of information and potential coordination: Rocky Mountain Land Institute, Eco- municipalities, Bay Area Alliance for Sustainable Communities.
 - l. TFM Register asked what Portland recommends to change land use patterns. D. Lerch mentioned zoning and local codes, transportation. Portland has a different situation where there has been a regional transportation model for thirty years. TFM Register advocates for shifting to more mixed use and density everywhere.
 - m. TFM Room asked if the presenter had examined land value taxation. D. Lerch responded that instead of taxing parcels at one rate, tax the land at a high rate and the development at a low rate. There seems to have been some success in Pennsylvania but there are uncertainty factors to resolve.
 - n. TFM Petouhoff mentioned Vancouver for potential design guidelines. Reflecting on the presentation, he says the actions are self-preservation issues. He notes that Peak Oil and Climate Change are twin issues. D. Lerch concurs that both require urgent efforts.
 - o. TFM Petouhoff mentioned that Redevelopment law could help fund relevant projects. Density could also increase land value if done well.
 - p. TFM Register states that culture will have to change, because the situation requires something new and different.
 - q. TFM Shah asked about the education component and what is going on. D. Lerch says that in Portland not much has happened. He says there should be a plan for follow-up. Perhaps a marketing campaign should be part of this. The UK is a bit more successful around "carbon".
 - r. TFM Graham asked what should be unique about the Oakland recommendations. D. Lerch responded that the politics are unique here, a sense of limits and place, regional organizations, network of higher education, as well as challenges regarding water supply, regional dependence on oil infrastructure, lack of planning cohesion.
 - s. Chair Shah asked for some suggestions about localization. D. Lerch stated that re-localization means a community finding how it can meet it's own needs through local manufacturing, farmers markets, businesses and local banking, thinking about how resources and energy flows.
 - t. TFM Register asked how D. Lerch would address a Chamber of Commerce. D. Lerch suggests that local businesses should look for ways to work with the city government to safeguard local resources. What are the basic needs of the local community and where do materials come from.
5. Working Group Status Reports and Discussion of Draft Recommendations:
- a. Transportation Working Group
 - i. TFM Room referred to materials provided in the agenda packet, including an outline and recommendations.

- ii. These include things like an Oil Independent office, pass an oil independent resolution to adopt the Oil Depletion Protocol and adopt a carbon tax, and develop a system to monitor oil and energy consumption, a public and personnel awareness campaign, supporting transit, and alternative transport/ disincentive for private autos, enforcement of traffic laws.
 - iii. Chair Shah comments that streetcars should be considered as competitive with BRT; they can be electrified. Employees and contractors could be given transit passes. There could be a city transportation system like streetcar systems. Community colleges could be involved in vehicle conversion programs (green job training). He states that in the short term CCA is going to be using dirtier, fossil fuels, but in the long term there will be cleaner fuels.
 - iv. TFM Lutz comments that the link between recommendations and “actions” to support recommendations is unclear.
 - v. TFM Petouhoff stated that purchase of electric parking enforcement vehicles would me an easy thing. He supports local transportation within nodes controlled by the city, would be a good objective.
 - vi. TFM Kim states that Green Job Corps. funding should be tied to carbon tax.
 - vii. TFM Register states that carpooling works against transit. High speed rail is a good option but it is perhaps 17 years away. Alternatively Amtrak could be upgraded. He recommends against biofuels because of the impact on the world food supply.
- b. Port of Oakland Working Group
- i. There are no recommendations to propose at this time.
 - ii. The materials enclosed with the packet contain a summary of information that the group has gathered.
 - iii. Some of the ideas the group is exploring at this time
 - a. Port does have some baseline GHG emission studies just for what the Port directly controls.
 - b. Port is vulnerable to oil shocks and could affect the city economy in a big way — there should be a study on this.
 - c. Cold-ironing should be increased. They are trying out natural gas but should use renewable energy from the grid.
 - d. Increase use of biodiesel in Port vehicles.
 - e. Enhance the rail/ ship connection by reconfiguring land use.
 - f. City could hire interns to look at some of these issues.
 - vi. TFM Graham remarked on the 8,000 employees for the airport.
 - vii. TFM Pethouhoff asked whether the group had seen any leases. There have been a few ideas out regarding trucks idling.
 - viii. TFM Graham asked if it was possible to have some kind of electric transport to connect the rail and ships. Also, she remarked that the Long Beach Green flag program would be good to investigate. Ships are seen by many in downtown San Francisco and so such a program could raise local awareness. Finally, after hearing from Jim Lutz that there are 60,000 maritime jobs, she suggested that better transit should be recommended.
- c. Food and Materials Working Group
- i. No update at this time.
- d. Land Use and Infrastructure Working Group
- i. Please see draft charrette notes in the packet.
 - a. There was input from transit agencies and ABAG at the charrette on September 14, which was well attended.

- ii. We should work with Berkeley; they are not too far along yet.
- iii. For recommendations (not already discussed)
 - a. Map in transit plans.
 - b. We might want to look at what San Jose has done.
 - c. Create zoning that has what we want, and let the private sector follow.
 - d. Be sure affordable housing and good jobs are included.
 - e. Use density and premiums to increase mixed uses.
 - f. Look at changing parking requirements
 - g. Look at BART's Transit Oriented Guide.
 - h. Review design guidelines in Vancouver, Redwood City and others. AIA would cooperate in future activities.
 - i. Support better transit, better use of BART parking.
 - j. Better coordination between Oakland planners and transit professionals.
 - k. Support Joint Powers Authority for urban village planning.

6. Discussion of Framework for Task Force Recommendations, Including Format and Content of Final Action Plan, and Development of Preamble/Introduction and Targets for Petroleum-Use Reduction.

- a. Julian Darley, President of Post-Carbon Institute, introduced himself.
 - i. He mentions that Vancouver B.C. could be a source of good information about Ports, since they have wrestled with similar issues.
 - ii. The history of industrialization of Europe lends good background for thoughts about sustainability. Those societies were not built on petroleum. Distance to daily needs are close and should be replicated for the 21st century.
 - iii. Will the increase of the price of oil be slow or rapid? The task force should think about what this difference could mean?
 - iv. What could this do to jobs and general economic flow?
 - v. We don't have the luxury of time.
 - vi. There should be two or three scenarios, including big seismic events as well as opportunities.
 - vii. What kinds of green jobs? Light manufacturing of daily products?
 - viii. What are the barriers to jobs within walking distance and then farther out?
 - ix. Streetcars can be electrified.
 - x. Why don't children walk to school? We should go back to small schools.
 - xi. Big squares should be used for daily street markets; they were the economic lifeblood of civilization for thousands of years.
- b. TFM Lutz remarks on the difficulty of industrial lands being held by speculators, and the school district not being controlled by the city.
- c. TFM Register stated that we need a declaration of urgency to transform cities—changing land use and transportation systems. J. Darley responded that we may need a crack in the supply chain for that to occur. He added that in Sebastopol, the city is investing in Car Share, focusing on second cars (trucks or larger vehicles). This shows a staggering reduction of car use--- and it gets people out of their cars.
- d. TFM Graham stated that we should focus on subsidizing housing for police and teachers if this would improve education and safety in Oakland.
- e. TFM Kim commented that he will be happy to continue social equity conversations. He added that he wants to ensure that any large land use changes proposed are not left up to the market as poor people could easily be marginalized. Current models for inclusionary housing are very limited.
- f. TFM Register stated that good government should facilitate housing for low income people and it's easier without designing for cars.
- g. TFM Lutz commented that recommendations should include a contingency plan to bring those teachers and police who live far away from Oakland in the oil depleted scenario.

- h. J. Darley says that it's worth talking to economists about contingency planning for an oil shock that lasts seven to twelve days. Having a lot of inventory may not be helpful.
 - i. D. Lerch offered continued support to the Task Force.
 - j. TFM Petouhoff asked whether affordable housing should be within the realm of the Task Force. Redevelopment can have a strong hand in guiding this. Alternatively, you can create greater value of the land through policy amortized across the board so that it is incorporated into the land sale price. The troublemaker in all cases is uncertainty for the developer.
 - k. Chair Shah stated that examples of cities that have done these things would be helpful.
 - l. TFM Lutz remarked that the TF should cover these ideas how to get affordable housing to work with petroleum independence.
7. Future Agenda Items.
- a. The next meeting will be October 18, continuing with today's discussion and the other things included in today's packet.
 - b. Report and dialog, recommendations and ideas on report writing, sorting and prioritization, identify recommendation examples from elsewhere
 - c. Plan future meeting dates.
8. Announcements.
- a. This meeting will be broadcast on KTOP. Check the KTOP website for times.
9. Adjournment.
- a. Adjournment was at 9:30 pm.

Discussion of Targets for Petroleum-Use Reduction.

Regarding the Oil Depletion Protocol, OIO Task Force Member Richard Heinberg will present, for discussion by the entire OIO Task Force, the importance of setting use-reduction targets and meeting them; and the Oil Depletion Protocol (ODP) as a sensible framework. The ODP simply sets the goal of reducing oil consumption by the annual depletion rate (the amount of oil used globally as a percentage of the amount left to extract) – which is a little less than 3 percent per year. Sustainability can only be achieved with regard to ANY non-renewable resource if the rate of consumption is declining by at least the annual depletion rate – so this is a general sustainability principle, there is nothing arbitrary about it.

Without a target for annual reduction, efforts such as ours will merely result in making usage of fuel more efficient, while total fuel consumption continues to grow. In that case, vulnerability to supply shocks actually INCREASES, because the slack in the system (inefficiency) has already been removed, while dependency has worsened. The only way for Oakland to reduce its vulnerability to supply shocks is to reduce its actual consumption of fuel (not just its inefficiency in the consumption of fuel).

The OIO Task Force will discuss the recommendation that the City of Oakland adopt the Oil Depletion Protocol as the basis for setting an annual target for reduction in petroleum consumption.

Discussion of Task Force Recommendations and the Final Action Plan Framework, Including its Format, Organization, Prioritization, and Content, and Development of Preamble/Introduction.

Oil Independent Oakland (OIO) By 2020 Task Force

Executive Summary

A Vision for an Oil Independent Oakland

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. When we look out over the globe, we can rejoice in several promising trends. Even so, here and there global developments continue to be unsustainable. The major "survival issues", among others energy, pollution, and climate problems, call for far greater commitment and strong political and industrial leadership, at all levels of government.

Declining access to conventional oil, in combination with our joint responsibility to stop global warming, will be a test of 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.

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.... *Oil Depletion Protocol? (Discuss at meeting)*

Paragraph of top recommendations.....(discuss at meeting)

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.

Proposed Outline of Final Report v1

Overview and Background

Why Should We Be Concerned? (NOTE: is this covered in enough detail in 'Exec Summary'? If not should Exec Summary be expanded or make this part of the larger report?)

- a. America's Oil Dependency
- b. Problems of Oil Dependence
 - A. Climate change
 - B. Peak oil
 - C. War
 - D. Pollution
 - E. Reinforces unhealthy economic patterns
- c. Benefits of Oil Independence
 - A. part of solution of most dire environment problems
 - B. part of the solution to oil depletion
 - C. creates green jobs and underlies new economy
 - D. builds community and sense of place
- d. What it could mean to Oakland
 - A. Reduce economic risk
 - B. Reduce contribution to environmental problems of all scales
 - C. Create new green jobs
 - D. Reduce crime
 - E. Transform our city
 - F. Make Oakland truly a model city

What was the Oil Independent Oakland Task Force?

- a. Charter
 - A. Mission and Members
 - B. Similar efforts
- b. Scope
- c. Key Drivers of Oil Dependency
- d. Classification and Prioritization Scheme
- e. Approach
 - i. Land use
 - ii. Transportation
 - iii. Ports
 - iv. Food, Materials, and Waste

Recommended Actions to Support Implementation of OIO Task Force Recommendations

NOTE: Could the following section could be merged with other parts of the report?

1. Binding resolution to pass the Oil Independence Implementation Resolution which resolves that Oakland become the first government adoptee of the Oil Depletion Protocol and thereby obligated to reduce oil consumption by 3% per year. And that Oakland assess a local carbon tax set to the rate needed to yield the mandated 3% oil consumption reduction per year with the revenues funding Oakland's energy independence activities as recommended. The actual carbon tax rate will be adjusted on an annual basis to maximize the likelihood of achieving annual oil consumption reductions of at least 3% at the lowest net cost to society as determined by a panel of experts.
2. 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
3. Develop information system to monitor & model oil and energy consumption
4. "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
5. City staff awareness campaign (*NOTE: Discuss suggestions on sub topics?*)
6. Outreach to large employers in Oakland to develop programs to reduce oil consumption
 - a. Educate about/encourage flex time models and compressed work weeks
 - b. Develop model programs for employers (e.g., model ordinances)
 - c. Provide incentives for trip tracking and reduction
 - d. Educate employers on opportunities for waste minimization, renewable energy use, clean fleet purchases, etc.
7. Contingency Planning
 - 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
8. Support Community Choice Aggregation (*NOTE: Discuss actual impact of CCA between now and 2020*)
9. Support Green Jobs Corps
 - a. Work with Community Colleges
 - b. Conversion of gas to electric vehicles
10. Take an active role in supporting national and state laws and regulations that will reduce oil consumption (e.g., fee-bates, zero-emission vehicles, climate change rules, carbon taxes, etc.)

Reducing the Oil Intensity of Transportation

NOTE: Should we add a short section on why transport is important to address, including GHG and oil use?

Promote Public Transport

1. Expand public transit
 - a. Bus Rapid Transit (BRT) and Street Cars
 - b. Explore municipal streetcar system
 - i. Oakland's Key and other historical streetcar systems
 - ii. Work with public transit entrepreneurs and the public
 - iii. Explore possibility of free transit system
 - c. High Speed Rail
 - d. Work with regional transit agencies
 - i. Expanded public transit in Oakland
 - ii. One-fare for all transit options
2. Increase walking
 - a. Support the Pedestrian master plan
 - b. Supplementary initiatives to educate and encourage walking
3. Increase bike usage in Oakland
 - a. Support the approval and implementation of Bike master plan
 - b. Supplementary initiative to educate and encourage bike usage
4. Universal Transit Access (UTA)
 - b. City employees transit passes
 - c. Employee transit pass programs
 - d. Low income and public housing transit pass programs
 - e. Student transit pass programs
5. Public transport education
 - a. Your travel choices matter outreach campaign
 - b. TravelChoice (grant funded TALC program). Program to educate and inform households on public transportation options. Put online.

Encourage Transport Sharing

1. Support expanding car sharing, beginning with city staff and car sharing parking place management. Use car share services in lieu of city vehicles.
2. Support dynamic ride sharing with online, telephone, and mobile phone access
3. Expand car pooling – incentives, adding online and telephone support infrastructure, organization and coordination. *[NOTE: Is this something we should recommend given that it can undermine public transport]*
4. Bike sharing

Support Urban Villages Model

1. Make sure transportation agencies are coordinating with respect to how they are serving Oakland and such that they adapt to support the Urban Villages model
2. Develop new transit to support the Urban Villages model
 - a. Night shuttles connecting with BART parking lots
 - b. Municipal street car system to connect villages
 - c. Bike routes

Disincentives for Private Autos

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.

Promote less oil-intensive transport

1. City EV procurement and leasing
2. Plug-in hybrid purchase and infrastructure development for EV cars
3. Promote Alternative Fuels
 - a. Encourage reclamation of waste oil for biodiesel production
 - b. Support development of alternative fueling stations
4. Enforce existing traffic laws (e.g., speed limits)
5. Enforce existing anti-idling laws
6. Driver education on vehicle maintenance (e.g., proper tire inflation and tune-ups) to improve vehicle efficiency.
7. Explore potential for traffic calming. Safe Routes to School (TALC program, piloted in Marin). 25% of morning driving is to school. Requires coordination with Public safety and public works department. Worked with Peralta in North Oakland. One example might be the Walking School Bus.

A Model City Fleet

1. Reduce the size of city fleets through partnerships with car share groups (e.g., Zipcar or City CarShare)
2. Biodiesel use in city diesel vehicles (B20 as a starting point, with exploration of the potential for higher blends). Priority should be given to locally-produced biodiesel from waste oil.
3. Require best in class purchasing for city fleet vehicles, with priority given to electric vehicles as appropriate (e.g., parking enforcement vehicles).

Recommended Actions to Support Implementation of OIO Task Force Recommendations Building Efficiency in Oakland's Ports

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.¹ 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).*
- *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

¹ Meeting July 30, 2007. Port of Oakland Meeting at the Port of Oakland Offices.

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
- 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)

Questions:

1. *A challenge is in balancing emissions reductions and oil independence sometimes the two are not in sync.*
2. *The Port is already headed down a path can the ship be turned around? If so who needs to be at the table? What are the points of entry?*
3. *The airport is still not too fleshed out. What can we do to deepen that?*

Areas of Focus of the Land Use & Infrastructure Working Group (LUIWG)

- Urban Villages Mapping
- Zoning to bring Live, Shop, and Work closer together
- Proactive Design Review Standards to make density livable and vibrant
- Infrastructure to support a positive transportation hierarchy
- Transfer of Development Rights to de-emphasize development in less desirable areas

Overview

Two major points have to be emphasized if we are to put into place policies to vigorously reduce oil dependence and solve related problems such as major climate changes, anthropogenic extinctions, and the economic, social and ecological dislocations of a precipitous end of cheap energy.

First, the arrangement and design of the city is crucial. The city is the largest creation of our species. To almost completely neglect it in the list of solutions has been a serious mistake to date. The just released movie, *The 11th Hour*, neglects it. The conference in Washington, DC two weeks ago called "the Triple Crisis" neglects it. The current *National Geographic* with the cover article on biofuels neglects it. Neglecting the foundational importance of the structure and design of the city is a major missing element in solving the crucial problems of this age. The City of Oakland could turn all that around and take the lead with a clear vision and general approach toward ecologically healthy cities.

The triple crisis of climate change, extinctions and "Peak Oil" is gigantic and only dealing with the largest of our human artifacts can we hope to solve it. The crux of the matter is that we have been building cities for cars, scattered low density development (sprawl), paving and cheap energy - which is going away at this time in history. Cities are what shelter us, are the armature upon which we attach our technologies and cities physically organize our activities in most ways. The way they are designed and built set us up for destructive or creative, healthy or pathological activities.

The design and building of "ecocities" is crucial and indispensable to any strategy for Oil Independence in Oakland or anywhere else. It is the foundation. We could be building cities for people, bicycles and transit, restoration of natural and agricultural landscapes and solar and wind energy systems.

The mapping system and associated program proposed under the name the "Oakland Urban Villages Project" lays out a means to initiate the transition from the car-oriented land use/infrastructure to the human-oriented land use/infrastructure.

Second, often when advocating for physical changes to the city social activists ask us to clarify how this helps the poor and the victims of prejudice. Racial, religious and other forms of sheer prejudice ecocity advocates don't pretend to alleviate. They need to be addressed on cultural, psychological and human values bases. But injustices due to poverty ecocity solutions also help enormously. Simply to further the building of cities in which people do not need to buy a car and pay the typical expenses of \$9,000 to \$12,000 a year for simple social/cultural membership, access to cultural and economic advantages of city, town and village living and so on, is a long step toward social justice. It is worth noting that in the 1950s municipalities passed laws requiring parking for all housing including low income. This increased the developers' cost by \$20,000 to \$25,000 per unit in current dollars - parking is expensive. The move completely destroyed the private building of low cost housing, forcing all such housing into the realm of government and into the mindset of subsidy and charity. The requiring of parking and concomitant

promotion of cars was a frontal assault on social justice in housing and assault on even just BEING in the city or various sizes of town centers with all their services. Building the ecocity is a powerful step toward social justice in exactly that way.

General Recommendations

In order to achieve a low energy, high livability and equitable city headed towards increasing oil independence, the creation of compact, low energy, dense and diverse, city and neighborhood centers accessed by walking, biking and transit is essential. We recommend Oakland commit to a land use pattern and complementary transportation systems that will rapidly shift the city and its citizens towards increasing energy conservation, efficiency and independence. This model will also add jobs and improve social conditions and the environment.

The pathway to oil independence will be achieved primarily through:

- (1) Zoning/land use measures, designating a number of centers or "urban villages" of various sizes throughout the city as highly mixed use, compact locations linked by high-capacity transit and bicycle greenways and offering a range of housing, retail, jobs and civic services.
- (2) City policies and practices that shift the city's built infrastructure to fit the above energy efficient model city while withdrawing from low density development outside the centers and/or that are obstructing natural features like urban creeks, or restricting the development of greenways, parks and urban agriculture.

We also recommend that the OIO TF build upon other good recommendation frameworks, such as Portland, Oregon and Japan.

1. Portland's Peak Oil Task Force Recommendations Address the Need For:
 - o Achieving a significant reduction in oil and natural gas use, to ease the transition to energy constrained future.
 - o Leadership, to build the public will, community spirit and institutional capacity needed to implement the ambitious changes.
 - o Urban design, to address the challenge at a community scale.
 - o Expanded efficiency and conservation programs, to shape the many energy choices made by individual households and businesses.
 - o Sustainable economic development, to foster the growth of businesses that can supply energy efficient solutions and provide employment and wealth creation in a new economic context.
 - o Social and economic support systems, to keep the impacts of fuel price increases from evolving into broader disruption for Portlanders, particularly for lower-income households.
 - o Emergency preparedness, to improve Portland's ability to respond in the event of sudden price increases or supply interruptions.
2. Japan's Environment Ministry Recommends Urban Centralization to Curb Global Warming. The Japanese Ministry of the Environment released a report in March 2007 recommending the centralization of cities. The report is the outcome of meetings held by the ministry since 2005 to explore the necessity for city planning that takes into account global warming countermeasures in order to drastically reduce greenhouse gases. See <http://www.japanfs.org/db/1815-e>.

Specific Recommendations

I. RECENTRALIZE: CREATE URBAN VILLAGES.

Develop a system to identify and designate a range of centers within Oakland in various sizes and densities (urban villages). Evaluate these existing or potential urban villages for accessibility to housing, jobs, nature and parks, services and transportation. Use this evaluation system to identify specific needs and create action/area plans to make each urban village vibrant, healthy and energy efficient. Ecocity Builders is working on such an evaluation system, (which is similar to what Portland Oregon has called for in its Peak Oil Task Force Report.

II. UPDATE GENERAL PLAN, in relation to #1.

Review the LUTE (Land Use and Transportation Element) of the General Plan and help develop recommendations for an amendment based on the urban villages approach. Example recommendations include calling for added density and diversity of uses in the centers, with commitment to principles of access by proximity rather than by automobile.

III. UPDATE TDR ORDINANCE AND START REMOVING DEVELOPMENT IN TARGET AREAS.

Propose a revision of Oakland's TDR (Transfer of Development Rights) ordinance to accomplish energy and land saving density shifts, based on the urban villages' development pattern. Provide TDR options and assistance to developers who pay into a fund to purchase development rights and remove buildings outside of urban village zoning areas and/or blocking such uses as creek restoration, expansion of community gardens, parks, recreational facilities and recycling lots and to allow height and density bonuses or other incentives to those developers who are building in designated higher density zones within urban village boundaries.

IV. ADOPT A CAR FREE BY CONTRACT HOUSING ORDINANCE.

Adopt an ordinance that provides that any residential building whose owner rolls over renters such that all residents eventually sign car-free contracts is awarded lower taxes and is encouraged to turn the former parking into other uses such as new units, shops, offices and storage, through an incentives package.

V. UPDATE ZONING.

Review Oakland's Zoning element with an eye to reconciling updated GP elements with Zoning looking towards the Urban Villages model, working with OIO Task Force, others.

- a. Inclusionary Zoning: Require all apartments or condos of more than 9 units to have 15% to 25% ³low to moderate income housing available.
- b. Car Free Street and Zones: Zone for opening streets to pedestrians and eliminating them to cars in a strategy that grows, for example, 5 percent of the street system every year.

VI. BUILDINGS and INFRASTRUCTURE

- a. MAXIMUM GREEN: Green Building policies should include incentives for not only energy efficiency and energy generation, but even larger incentives for solar passive design and placement of buildings in minimal energy relationship and maximum transit benefit relationship to existing urban fabric.
- b. GREEN STANDARDS: The city should consider requiring all new buildings to meet a standard of energy efficiency that is beyond Title 24 of the California Code of Regulations of California's Energy Efficiency Standards for Residential and Nonresidential

Buildings. (The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.) For example, Oakland could require a 20% or greater improvement over Title 24 for all new buildings.

- c. DESIGN GUIDELINES: Review multi family residential design guidelines and make updates based on other successful models like Portland and Vancouver, with a base requirement of green features and extra bonuses for above and beyond, like eco roofs. Design guidelines should also include not only single buildings, but also public spaces, and should encourage or require integrated planning approaches to achieve overall high quality, useful and attractive city spaces.
- d. INFRASTRUCTURE: Review internal and external pathways and propose updates for development impact fees and infrastructure improvements.
- e. IMPROVING EFFICIENCY OF EXISTING STOCK: The city should work with landlords to improve the energy efficiency of all existing apartment buildings and condos in order to make the existing housing stock more energy efficient.

VII. ENERGY SUPPLY

- a. SOLAR AND WIND ENERGY SUPPLY TO GRID: We recommend that Oakland form a CCA (Community Choice Aggregate) with nearby cities to purchase and/or develop bulk renewable power from primarily solar and wind power plants.
- b. GRID SOLAR OVER PHOTOVOLTAICS: For maximum energy and land efficiency, we recommend grid delivered electricity from solar and wind sources to multifamily buildings designed for passive solar, solar thermal, and with the use of rooftops also for gathering places and views, water collection and insulation.
- c. ELECTRIC PUBLIC TRANSIT SYSTEM, DELIVERY AND SERVICE VEHICLES: We recommend using clean electricity to power rail systems as well as the city's service and delivery vehicles. Limited biofuels could also be appropriate for some service vehicles.

Food and Materials

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 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), 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 policies 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 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 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>)

[END OF AGENDA]

