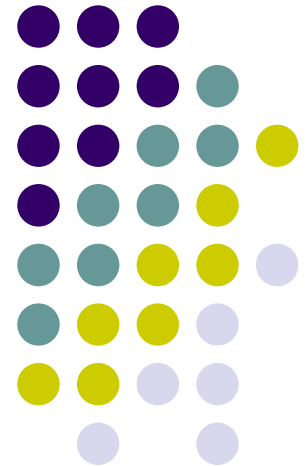


Wrap-up Comments: Climate Change Transportation Planning

Kenneth C. Topping, FAICP
Topping Associates International
kentopping@aol.com

Annual Conference
National Association of Regional Councils
Sunday, June 26, 2005
Monterey, California

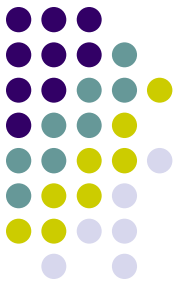




Today's Presentations

Phillip Duffy, Lawrence Livermore:

- *Overwhelming evidence of climate change*
- *20th century temperature increases unusual*
- *1 degree centigrade over past 100 years*
- *Some changes are human-caused – evidence is growing stronger*
- *Warming over past 50 years is predominantly from human sources*
- *Global warming will accelerate*
- *Will stress be a stressor in the future in addition to social and economic changes*

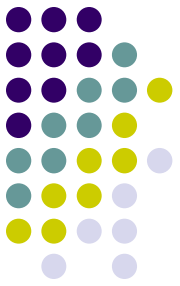


Today's Presentations

Daniel Sperling, UC Davis:

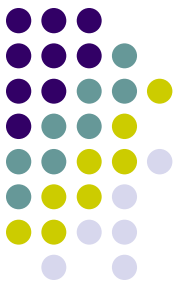
- *We need to be talking about GHG reduction below the baseline*
- *Carbon emissions are up largely due to oil consumption*
- *VMT increasing 2%/year, twice as fast as population*
- *Transportation trends are not sustainable*
- *Most promising:*
 - *Cellulosic ethanol*
 - *BEVs*
 - *Hydrogen from renewables, fuel cells – down the line*
- *Issue is very urgent*

Today's Presentations



Diana Turchetta, USDOT-FHWA:

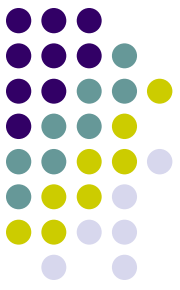
- *DOT involved with substantial research program*
- *Example, working with Center for Clean Air Policy*
 - *Freight mitigation strategies*
 - *Guidebook for mitigation strategies*
- *Issue to become bigger in the future*
- *Important for MPOs to look at climate change and transportation*



Today's Presentations

Panelist Kate Zyla, Pew Center Change:

- *Most energy use is petroleum*
- *Carbon emissions are increasing from cars, trucks, vehicles using roads – comprises 72% of GHG*
- *Options:*
 - *Fuels with less carbon*
 - *Increase efficiencies*
 - *Reduce transportation activity*
- *Small changes add up*
- *Transportation carbon emissions reduction could be cut by 20-25% by 2015, 45-50% by 2020-2030*
- *Cost-effective actions can be taken now*



Today's Presentations

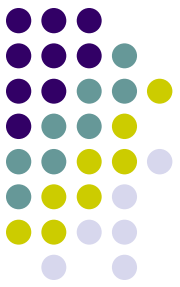
Melissa Royael Capria, Cities for Climate Protection:

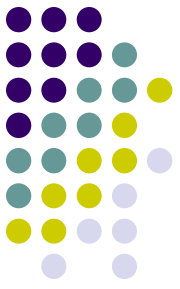
- *ICLEI includes over 500 cities worldwide, 156 in US*
- *Climate action makes sense for cities*
- *5 Milestone Process → Climate Action Plans*
- *Notable local actions:*
 - *Marin County – general plan*
 - *SF – over 40 measures*
- *US Mayor's Climate Protection Agreement*
- *CCP encouraging variety of actions implemented measures by local towns and cities – e.g., CCRPA*
- *Regional Capacity Centers and regional networks*
- *MPOs can start by providing forums*

Today's Presentations

Rex Burkholder, Metro, Portland:

- *Voters mandated Metro with some powers → 2040 Growth Concept → provisions included in local plans*
- *Compact urban centers, station plans with higher densities (40 du/ac), parking minimums reduced, parks and trails, tree planting (2 million in 10 years)*
- *Transportation measures include transit, walking, bicycling, traffic calming, road design tailored to land use – streets don't look the same*
- *Transit works in combination with land use*
- *Transit provides 27%% of work trips, a four-fold increase*
- *VMT is down*





Today's Presentations

John Zamurs, State of New York:

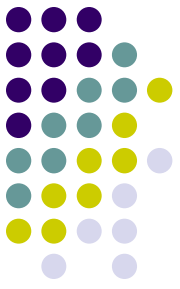
- *New York State Energy Plan – blueprint to inform energy decision-making – applies to all state agencies plus MPOs*
- *65 recommendations based on GHG emissions goals*
- *Working with MPOs*
 - *Determine GHG emissions and mitigations*
 - *Prevent urban sprawl, reduce VMT*
 - *Reduce energy use and GHG emissions*
- *Focuses on regionally significant projects → energy and GHG analysis important to project evaluation*
- *Varied results (13 MPOs, range in capabilities)*
- *Statewide results: 11% benefit in energy and GHS reduction*
- *MPO reactions: want more guidance (Governor announced that California standards will be adopted) Force for positive change*

Today's Presentations



Doug Thompson, CARB:

- *Potential climate change impacts on California: health, agriculture, forests, water resources, coastal areas, species and natural areas*
- *Clear public support for action (by automakers)*
- *AB 1493 aim: max. feasible and cost-effective reduction in GHG emissions*
- *Assessing available technologies either in use or could be more widely used - standards designed so all models can comply*
- *Potential with regulation 18% reduction in 2020, 27% in 2030*
- *Reductions are possible with technologies available today*
- *Governor comprehensive targets:*
 - *2000 levels by 2010,*
 - *1990 levels 2020,*
 - *80% below 1990 levels by 2050*
- *Expect transportation and land use coordination*



Today's Presentations

Larry Greene, SMAQMD:

- *No direct mandate (yet) for carbon dioxide*
 - *Working with SACOG + 5 other air districts*
 - *Provides good outreach to elected officials*
- *SIP targets will need to get 2-4 tons from land use program*
- *Operation (VMT reduction) strategies*
 - *Include transportation, housing, compact development, mixed use, conservation, excellence in design*
- *Community Workshops - packages built from bottom up*
- *4 scenarios: base case, preferred (mix in-city and in-between)*
 - *More attached lots*
 - *661 → 304 square miles*
- *Reduced VMT, emissions*
- *28 local government commitments*
- *Complementary SIP/MTP strategies*
- *Need to monitor for EPA*



Today's Presentations

Ina Shlez, BAAQMD:

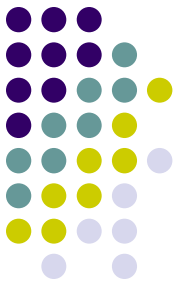
- *Interest in climate change based on variety of environmental impacts – 19% GHG increase projected in 12 years*
- *Climate change temperature increase effects: heat waves, vector borne diseases, respiratory problems, agriculture, wildfire potential, sudden oak death syndrome, air quality*
- *Carbon dioxide is principal GHG of concern – relying on indirect regulation*
- *Question is how to communicate of this with local entities, business, emissions producers*
- *Local initiatives: 17 local governments, various stages*
- *Developing Climate Protection Program*
 - *Provide regional leadership*
 - *Involve local stakeholders*

Climate Change, Smart Growth and New Urbanism



- *Many land use implications resulting from climate change outcomes:*
 - *Coastal zone erosion and flooding*
 - *Depletion of water supplies*
 - *Urban heat zones*
 - *Agricultural disruption*
- *Planners only beginning to embrace issues*
- *Need to look at Smart Growth potential tools*
 - *More compact development with greater densities*
 - *Transit-oriented development*
 - *Pedestrian-friendly development*
 - *Mixed use development – requires changing standard zoning ordinances*

What's Next: Transportation and Land Use Planning Integration



- *Smart Growth and New Urbanism promote development valuing the pedestrian over the automobile*
- *This land use approach can help with long-term hydrocarbon emissions reduction*
- *Planners, architects, developers, local agencies need to take responsibility*
- *Land use planning and transportation planning need much closer integration*
- *Suggestion: NARC-APA and other professional consortia regarding integrated land use-transportation carbon dioxide emissions reduction strategies*