

**Fairfax Chair's Private Sector Energy Task Force (ETF) Meeting Notes
June 28, 2012**

Remaining Actions

The ETF report and recommendations represent a “beginning” for broad efforts within Fairfax County to improve the energy efficiency per capita (and reduce the Greenhouse Gas (GHG) emissions) for an estimated 1.3 million residents, 480,000 households, and 860,000 employees by 2040.

To launch “the beginning,” the Chairman stated that:

- 1) An ETF sub-group was being formed to shape the creation of a public/private sector partnership, or Energy Alliance, to help the county implement its energy efficiency goals required to sustain the competitiveness of the county as a business location with a strong economy well into the future. ETF members who would like to participate in this working group should contact Leo Schefer.**
- 2) The Process Committee, under Art Walsh, will complete its recommendations for incentives.**
- 3) The overall ETF Recommendations would be revised based on this discussion and circulated to members for their comment, and hopefully, approval. *If the comment was significant, there would be a further meeting on the last Thursday of July (July 26th) at 10:00 a.m. in Conference Room 232 at the County Government Center.***

Related thoughts: “Take the necessary time to get it right,” John Thillmann noted (a thought echoed by many). Jim Corcoran said: “We’re at a starting time. The work will all be for naught if there’s no sustaining organization created.”

Transportation

A panel of transportation experts reviewed the draft transportation plan with the ETF. In summary, they noted its balance, completeness, concise nature and accuracy, and offered more information to strengthen its conclusions.

Dr. Ronald Kirby also noted that unlike traditional emissions, the impact of CO₂ on the atmosphere is cumulative, and therefore the need to reduce GHG emissions from transportation was urgent.

Tom Biesiadny, Director, Fairfax County Department of Transportation

- The report was generally sound and provided useful recommendations.
- The linkage between land use and transportation is good.
- The rail transit conclusions are accurate.
- Additional information should be added regarding the region's plans to link major activity centers with bus services.
- Expanded use of bicycles provides "some very low hanging fruit" and should be expanded. Bike lanes are being added a very low cost, largely by striping.
- There is useful information that can be used to expand the telework section.
- "Overall, it's a very sound report."

Dr. Ronald Kirby, Director Transportation Planning, Metropolitan Washington Council of Governments

- Agreed that it's "a very good report."
- Over the long-term, the new federal CAFÉ standards should produce a major reduction in CO₂ emissions. Under the old CAFÉ standards (27 mpg), CO₂ emissions increased steadily with the growth in highway use. Under the new CAFÉ standards, CO₂ emissions reduce with increased use.
- Reference to Route 395 should be amended as a planned improvement has been eliminated from the TIP.
- **Unlike ozone, nitrous oxides and other "traditional" emissions, the impact of CO₂ is cumulative, as it remains in the atmosphere for 100 years or more. This makes it "very different to regular emissions," places a "great pressure on the short-term," and puts a "focus on demand management and operation of roads to get minimum emissions from increased speeds."**
- Dr. Kirby pointed to the curve in the report relating reduced CO₂ emissions to higher travel speeds.
- The new CAFÉ standards require 50 mpg-plus from light vehicles, and for the first time, set standards to reduce the fuel consumption of heavy vehicles.
- Therefore, fleet turnover is critical if these emission reductions are to be gained. However, the average fleet age is going up.

Lon Anderson, Director, Public & Government Relations, AAA Mid-Atlantic

- "Commended the Fairfax Board of Supervisors for convening this Task Force and recognizing the role transportation plays in energy consumption."
Therefore, "If one takes an honest look at being a better user of energy, one's got to look at transportation."
- "This report takes an honest look and paints a very different picture for 2040." The report notes that:
 - By 2040, only 7.5 % of the county's population will live within half-a-mile of a rail transit stop; only 18% will live within 1 mile.
 - People will only be able to use mass transit for 4.4% of their trips.

- Rail is so expensive it's unlikely there will be much expansion of rail transit. Therefore, transit improvements will be on roads, taking road space. Therefore, roads are really important to our future.
- “This report profoundly rejects” the concept that transit can solve our transportation problems, and says that uncongested roads are important to energy reduction.

Doug Guernsey, Executive Vice President and COO, Guernsey Office Products

- Mr. Guernsey “liked the report, which seemed comprehensive and viewed transportation from different angles.”
- “For the transportation of goods, options (like transit) are not available as they are for passengers.”
- Congestion mitigation strategies are key to Guernsey's operation within the region. Drivers are free to change their routes to avoid traffic (this increases Vehicle Miles Traveled – VMT – but by sustaining higher speeds, it minimizes the impact of increased CO₂).
- Fuel burn can be reduced 60% or more for freight vehicles by eliminating congestion.
- Therefore, there is a huge economic as well as environmental imperative to improve roads.

Farid Bigdeli, VDOT Transportation and Land Use Director for Loudoun County

- It's a balanced report that touches every program VDOT has or may have. It's a good report.
- There are no surprises. “The report is pretty balanced, not biased in any way. It notes there are other modes, but says we have to address roads.”
- The telecommuting potential should be increased.
- Traffic management through technology to increase capacity is noted. VDOT's current pilot coming on I-66 is an example. “Whatever is done by VDOT has to be done in cooperation with the County partners.”

Discussion

Is there urgency, as Dr. Kirby suggested?

Natural Gas (NG) is a theoretically-available alternative lower carbon fuel. Quarles recently opened a NG station at Dulles. However, if the fuel isn't readily available across the region, it's not usable. It's not practical to drive halfway across the region to fill up.

“We're always looking for what is viable, but we're not there yet,” Guernsey noted. Guernsey noted that some years ago, Washington Gas had opened a number of NG stations. Their maintenance contractor made a lot of money converting the Guernsey trucks to NG, then made even more money converting them back to gasoline when Washington Gas closed its NG stations.

Tom Biesiadny noted that there's “nothing earthshaking, but if you get average speed up to 50 mpg, you get the most efficient use of the vehicle and the least pollution, so addressing the pinch points on highways can produce a lot of bang for the buck.”

The Fair Lakes/Fairfax Parkway interchange now nearing completion “will make a huge difference” and there are other lesser projects that have improved traffic flow.

“The entrance to the Dulles Toll Road for southbound Capital Beltway traffic used to back up across the river,” Lon Anderson noted. “The addition of about 400 yards of paving to create a second lane eliminated this backup.”

Are there items that should be included in this report? Is transportation energy really important?

Dr. Kirby noted that:

- The federal CAFÉ standards will have a huge impact.
- Mercedes has a fuel cell vehicle, but it’s only available in California because they have the hydrogen fueling infrastructure. Could Fairfax County attract similar infrastructure? (A fuel cell runs on hydrogen. The exhaust product is water and contains no CO₂.)
- Staying ahead of interchanges that can become backups has a big payoff.
- Incidents can be managed better.
- We should keep our eye on technology and how it can help us increase highway capacity.

Tom Biesiadny noted that VDOT has an active traffic management pilot being developed on I-66. VDOT also is working on “connected cars,” i.e. cars that talk to each other so that when a car brakes, other cars behind it will automatically brake at the same time.

Doug Guernsey was asked what were the key factors driving energy decisions: the cost of fuel; congestion; delivery efficiency; emissions, etc.?

“All of the above,” Mr. Guernsey noted. “Congestion pushes up the cost of everything. We pay drivers overtime to deal with congestion, it increases wear and tear on our vehicles.” Guernsey is buying Mercedes Sprinter trucks, as they offer better fuel consumption.

How do we deploy infrastructure for alternative fuels? What’s the government’s role?

Lon Anderson noted, “That’s a really critical question. About 12 years ago, AAA had five breakdown trucks running on compressed NG in partnership with Washington Gas. We made the investment; Washington Gas did not, so we lost. The net savings disappear if you have to cross town to refuel. Fueling infrastructure is fundamental.”

Melissa Adams for Washington Gas noted that in the past they had developed about 10 stations across the area. As virtually no one used them, they had to be shut down. Washington Gas is very interested in providing NG for road vehicles, but it “needs demand.”

Tom Biesiadny noted the county's efforts to stimulate electric car recharging stations, thanks to a legislative amendment. Electric recharging can be provided at relatively low cost.

Supervisor Gross asked Doug Guernsey if his company's drivers were CDL licensed and trained.

Mr. Guernsey noted that his drivers are not CDL licensed, but they are trained and safe. They're not allowed to use cell phones or listen to music while driving.

Supervisor Gross noted that Virginia has the easiest driving license requirements and lacks rules regarding use of cell phones and other distractions. Therefore, could we solve some of our congestion problems if drivers paid attention to traffic and drove more smoothly?

Lon Anderson noted that congestion has forced multiple uses. Congestion fuels insensitivity and aggression. Supervisor Gross noted the need for personal responsibility, and therefore for driver education to be included in the report.

Jim Corcoran noted that "congestion is the problem. It's driving jobs out of Northern Virginia. Our lack of a well-thought-out-plan to increase highway capacity is costing this region jobs.

Other Comments

- David Molchany was pleased to see that the report noted that:
 - Minor improvements can produce major changes in traffic flow.
 - Maryland is experimenting with a BRT system operating on the regular highway, but with technology giving buses priority.
 - Alternative fuels cannot be sold where vehicles are maintained, and this is part of the infrastructure problem.

- John Jennison:
 - "Liked the reasoned opinion" in the report.
 - Would like to see a breakdown of commercial v private trips added.
 - Noted that we should watch out for unintended consequences.
 - Personal decisions also drive transportation energy consumption.

Regarding emergency response, Jennison noted that "this is where government can help by working to clear up incidents quickly."

Lon Anderson noted that we're "still running on mid 20th century technology in the way we communicate with drivers.

Doug Carter noted that street lights with sensors that can provide real-time information for traffic management are now available. These cost \$1,000 to \$2,000 and provide the information needed for a real-time information system.

Doug Koelemay asked, "Are we being ambitious enough in the transportation plan?"

Doug Guernsey noted that there is "a limit to what technology can do."

Parents drive children one block to a school bus stop for reasons of safety and to provide more face time with their children.

Quarles is opening its NG station at Dulles, as it has a captive market on the airport.

Steve Walz noted that phasing road-based transit with BRT is an inexpensive way of building transit ridership toward trolley car levels.

Melissa Adams noted that Washington Gas would like to provide facilities for NG vehicles, but need a base market to justify the investment.

Doug Koelemay noted that some cities integrate school bus and transit needs by giving the students passes to use the transit system to alleviate the school bus need.

Process Working Group

Leo Schefer reported that two, possibly three effective incentives had been developed and were being refined into workable concepts.

The working group felt that county code may well cover the energy requirement for new construction, so the focus may need to be on the renovation of existing buildings.

Proposed Recommendations to the Board of Supervisors

Two overall comments:

- 1) Particularly with respect to buildings, the ETF should go back to its originally proposed, more detailed actions in the interim report. The current recommendations did not inspire, lack specificity, and would not produce the desired strategic actions.
- 2) Similarly, the transportation recommendations to refer the report to a future group were unsatisfactory, as action was needed.

The Chairman noted that the ETF had found three barriers or challenges.

- 1) Regulatory and process barriers in Virginia and Fairfax County, as well as the uncertainty they create for the private sector investor, whether homeowners or employers.

- 2) The capital investment required versus the payback period to achieve the energy cost savings and marketing benefits to be gained.
- 3) General ignorance of the money to be saved from an investment in energy efficiency, and of the many tools available to assist homeowners and businesses alike with energy efficiency improvements.

Accepting that the recommendations needed to be improved, were the five points generally on target?

Melissa Adams: We need to “bake in” the requirement to reduce GHG.

Doug Koelemay: Facilitation is the starting point. Education/public outreach is required to overcome the natural inertia to change.

Leo Schefer: Conrad Mehan is correct in noting that we do not have a breakthrough game-changing project – a strategic lever to catch popular interest and fire the imagination. We need to excite people with innovative factors which are cool and neat.

John Jennison agreed, noting we also have to “put a dollar sign on it.”

Regarding Transportation Recommendations

- County Chair Sharon Bulova stated that “When we got into this, the focus was on buildings, particularly older buildings. We found that over one-third of energy is consumed by transportation, and thus the need to do something about it.”
- Sharon Bulova noted that there were a lot of transportation organizations. They do not focus on energy. The ETF may want to note the energy implications of transportation and ask that its transportation report be shared by the Board with those existing transportation bodies.
- Gary Kirkbride noted that Fairfax County does not control regional transportation, but it does control buildings. New buildings are basically okay with respect to energy. The older commercial buildings and residential consumption need to be emphasized.
- Lon Anderson noted that “we’ve done a self examination, and to our surprise, found that over one-third of the energy is burned by transportation,” so we have to be “holistic” and include transportation. There is low hanging fruit for reducing transportation energy consumption, namely congestion elimination. Congestion essentially is a “tax” that needs to be reduced. We should recommend that Fairfax County give more prominence to energy efficiency concerns at the regional Transportation Planning Board level.
- The Chairman noted that the need for energy efficiency and to reduce GHG emissions provides a common platform for interests who propose and oppose transportation improvements.
- Doug Koelemay: People’s expectations have been successfully managed to accept congestion. We should use energy efficiency to shake that complacency and provide the leadership to resolve the congestion issue. People make value judgments on transportation.

- Kambiz Agazi: Transportation could be referred as suggested in the draft recommendations to the EP3 (Energy Alliance), and the EP3 could then make recommendations to the Board.

Process

- The Board of Supervisors is expecting a report from this group, Chairman Bulova noted. The Board typically refers reports to staff for their recommendations on the actions to be taken before it acts as a Board.

Final Comments

- There were a number of public/private partnerships worth cherry picking for ideas, including the Bay Area Energy Alliance, The Tysons Task Force, EQAC, NVTA, the Northern Virginia Technology Council, although they were considered to be more of a Chamber of Commerce, and others.
- The EP3 or Fairfax Energy Alliance needs to be independent to be effective.
- The PACE program may answer the question why more people will not pay to reduce energy costs.
- Regarding data centers, David Molchany offered to provide words for inclusion in the 21st century building section of the supporting information.
- The county should not be rigidly revenue neutral in the short-term; it should be willing to invest in order to gain social benefits and increased revenue in the medium and long-term. The county and its procedures have influence on investors. Anything the county can do to reduce risk for the private investor would incentivize the application of energy efficiency to buildings.
- Incentives from government to nudge the private sector can produce huge positive returns for society.
- Regarding a public/private sector partnership: Don't market forces cause "things to bubble to the top?" The quest for energy efficiency is producing game-changing technologies, as did the IT model 30 years ago. But, there's been lots of private sector casualties to get where we are today in IT.
- Evolution is better than revolution.
- Lon Anderson thanked the Board and Chairman Bulova for convening the ETF. "We've all learned. There is a willingness to move forward with a public/private sector partnership and AAA Potomac is happy to help."
- Steve Walz, Gary Kirkbride and Melissa Adams echoed Lon Anderson's thanks and thinking. Gary noted that we should "not lose the focus of the initiative."
- Chairman Sharon Bulova expressed the county's appreciation for the time ETF members have taken, and for their successful effort to visualize the bigger picture.
- As a final point, Doug Koelemay noted that the global market is beginning to become more self contained within regions. "Energy efficiency positions us to optimize our economy for this global change."