

# 2030 Long Range Transportation Plan Climate Change and Energy Position Statement

## INTRODUCTION

Energy-rich and easily adaptable fossil fuels form the foundation of our fast paced contemporary society. For decades, the supply seemed endless. More recently, the threats of climate change, energy descent, political instability in oil rich regions, and environmental degradation suggest we are reaching the limit to our fossil fuel intensive lifestyle and economy. Some people question whether fossil fuels are truly growing scarce and explain that supply restrictions are merely the result of market influences. However, evidence to the contrary is strong. We cannot take the chance that these limits to energy supplies are imaginary, lest we find ourselves unprepared for the future.

In recent years, scientific evidence indicating changes in the global climate system has accumulated to highly convincing proportions. In November 2007, the United Nations Intergovernmental Panel on Climate Change, acting on reports from an extensive network of experts from around the world, formally agreed that, “warming of the climate system is unequivocal”<sup>1</sup>. This report, along with many others, suggests that sometime in the near future Earth will experience significant changes in weather patterns; the exact consequences of which we do not yet fully understand. The same UNIPCC report insists that action to mitigate and prepare for the effects of climate change must take place quickly, resulting in notable improvements no later than within the next ten years, i.e. by 2017.

Together with climate change, fuel availability and affordability promise to remain significant elements in planning for the future. This trend is evidenced by rising costs of gasoline, increasing food costs, and other widespread economic impacts. Limited and/or high cost access to fossil fuels is likely to have immediate and direct impacts on the general population. Americans responded very quickly to the 2008 gasoline price spike by buying more efficient cars, driving less, and looking for alternative ways to travel.<sup>2</sup>

In light of these concerns, the ITCTC deems it necessary to address the need to minimize the negative impacts of transportation on the environment and to consider strategies that improve our ability to respond positively to changes in larger transportation networks and in the energy economy. The ITCTC is fortunate that our earlier Long Range Transportation Plans (LRTPs) have laid a solid framework that incorporates goals and objectives that help address the challenges of climate change and energy descent. The ITCTC intends with this Position Statement to refocus its attention on these objectives and advance cooperation within the community and between all concerned local agencies.

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<sup>1</sup> United Nations Intergovernmental Panel on Climate Change. Climate Change 2007: Synthesis Report, Summary for Policy Makers. November 2007.

<sup>2</sup> Leonhardt, David. Big Vehicles Stagger Under the Weight of \$4 Gas. *The New York Times*. 4 June 2008.

## TRANSPORTATION IMPACTS and WHY PLANNING IS IMPORTANT

While many of the most articulated transportation related concerns around climate change are environmental in nature, the impacts of transportation extend well beyond the ecological. The way we travel affects our lifestyle options, the quality of our air and water, our health, and also our local economy. Addressing energy descent and climate change in our transportation planning will not only improve our quality of life but also improve adaptability to changing price pressures. What follows is a summary of the key impacts of transportation.

**Public Health** – Increasing the modal share of human-powered transportation, such as walking and bicycling, through the provision of improved facilities and the design of walkable developments and neighborhoods, helps combat a range of modern health problems such as obesity, adult-onset diabetes, heart disease, osteoporosis, cancer, and stroke. Having access to safe pedestrian and bicycle routes means people are more likely to choose walking or biking as modes of transportation, thus increasing their physical activity. People are also better able to interact with their community and engage in outdoor activities with their families, building valuable social capital. Implementing transportation strategies and policies that reduce reliance on private motor vehicles will result in reduced air pollution leading to reductions in the incidence of asthma and other respiratory disease. Less fuel exhaust in our air will result in less residual pollution in our local soil and water resources.

**Land Use and Environment** – Approximately 90% of oil imports into the United States are used for transportation. According to a report from the U.S. Environmental Protection Agency's (EPA) Office of Transportation and Air Quality (OTAQ), transportation accounted for 27 percent of U.S. Green House Gas (GHG) emissions in 2003<sup>3</sup>. These numbers are strongly correlated with sprawl development patterns – which depend on increased highway infrastructure and personal vehicle use. Transportation strategies can be used to facilitate the implementation of more efficient land use settlement patterns – namely, land use designs that emphasize and prioritize public transportation, pedestrian, bicycling and shared (car share, car/vanpool, rideshare) modes of transportation.

**Fuel Costs/Costs of owning a car** – When you add up financing, registration costs, insurance, maintenance, repairs, and fuel, the annual cost of car ownership is a significant expense. The high cost of owning a depreciating but necessary asset like a car has a greater impact on the low-income households and on those who cannot afford to live near work and amenities. In the foreseeable future and almost with certainty within the 20-year planning horizon of the Long-Range Transportation Plan, as energy reserves - especially petroleum - decrease in quantity and quality, fuel prices are likely to increase. Investing in strategies that reduce car dependency offers more freedom to people who cannot afford personal vehicles and to those who would rather not own a personal vehicle. It will also reduce personal spending on transportation, and enhance our resilience in the event of future interruptions in larger energy networks.

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<sup>3</sup> U.S. Environmental Protection Agency, Office of Transportation and Air Quality. *Greenhouse Gas Emissions from the U.S. Transportation Sector: 1990-2003*. March 2006. <http://www.epa.gov/oms/climate/420r06003.pdf>

## **INNOVATIONS and IMPROVING TRANSPORTATION**

Planning departments around the country are becoming increasingly aware of the need for fundamental changes in the way we travel<sup>4</sup>. This awareness is spurring exciting innovations in transportation planning. Numerous strategies and tools, including a variety of Smart Growth techniques and transportation-oriented development (TOD) concepts, can be applied to improve multi-modal transportation in communities and the connectivity between them. Advances in vehicle technology might result in a car and truck fleet that is cleaner and more efficient – but not necessarily cheaper or of less consequence with regards to congestion and land consumption patterns. The maturing of the information age has tremendous potential to help implement network-based programs such as bike/car/ride sharing, vanpools, enhanced traffic operations and advanced customer information and service strategies for public transit. Modern computer capabilities and other technological advances are helping in the development of new transportation concepts like automated people movers, late generation light rail, personal rapid transit (podcars), and intelligent transportation system applications. In thinking about long-range transportation planning for Tompkins County, it is important to emphasize aspects of our current system that support sustainable transportation, sustainable land use, and encourage innovative application of human, material, and technological resources. However, periods of crisis often produce rapid innovation and the ITCTC must also keep abreast of arising innovations that can be applied locally.

### **WHY ACT LOCALLY?**

In a recent interview, Martin Wachs of the Rand Corporation noted, “the United States is the only major industrialized country in which the leadership on [climate change] issues is coming from local governments and states.” There are numerous states and local jurisdictions that are taking action on climate change in advance of federal action. As of the approval deadline of this 2030 LRTP (Dec. 2009) strong national leadership in addressing climate change and energy descent was still lacking. Without a cogent national policy local action is of paramount importance in combating and adapting to the impacts of climate change. Additionally, local planning can influence regional transportation habits by providing an example of sustainable transportation and by facilitating cooperation and innovation between communities. Since planning affects the way we live long into the future, today’s investment decisions will affect how well our transportation system adapts to climate change and changes in energy availability far into the future. Creating local and regional resiliency in our transportation system will help the area address any challenges that will come from reduced fossil fuel availability and variable climate patterns.

### **SUSTAINABLE TRANSPORTATION IN TOMPKINS COUNTY**

Ithaca and Tompkins County are fortunate to have a population that is aware and enthusiastic about addressing climate change. In this respect, this community is well positioned to implement the actions needed to address climate change and energy descent challenges.

Due in large part to a history of long-range transportation planning that supports many elements of a sustainable transportation system, Ithaca and Tompkins County already have one of the best public transit systems in Upstate New York. A relatively large proportion of Ithaca and

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<sup>4</sup> Hume, Christopher. A Planning Headache, 50 Years in the Making. *The Toronto Star*. 31 May 2008/

Tompkins County residents commute by walking and bicycling, especially in the urban areas. It is important to continue to improve the safety and viability of public transportation and walking in order to expand their modal shares. There is also great potential to increase the modal share of bicycling by providing more dedicated facilities.

Private business models such as car sharing, ridesharing, and vanpooling must be encouraged to operate to their highest capacity. In addition, as mentioned above, innovative use of resources and new information and transportation technologies must be considered for implementation, while evaluating new technologies and programs that are surely to arise in coming years. The LRTP includes additional information on available strategies to enhance sustainable mobility and accessibility in Tompkins County.

### **ROLE OF ITCTC//LOCAL GOALS**

As an important contributor to planning efforts for the Ithaca Urbanized Area and Tompkins County, the ITCTC's role is one of cooperation, support and serving as a catalyst for transportation programs and projects. In such a role, the ITCTC will help maintain an ethic and awareness that prioritizes climate change and energy security in transportation policy and in other policies that directly and indirectly affect the way our residents travel. The ITCTC will also work with local leadership to generate community involvement in planning for a more sustainable future.

In particular the ITCTC will work through its required core planning documents, the 20-year Long-Range Transportation Plan (LRTP), the Transportation Improvement Program (TIP) and the annual Unified Planning Work Program (UPWP), to promote goals that help address the challenges of climate change and energy descent. The LRTP embraces a the concept of Sustainable Accessibility, which reflects the community's vision of transportation as a truly integrated multimodal system that recognizes the combined role of proximity of land uses, connectivity, mobility and its interaction with our environment and our quality of life.

### **CONCLUSION**

The challenges of climate change and energy availability have the potential to fundamentally change the ways in which we all live and work. As such, they will require a new way of thinking about local and regional planning and cooperation. The implementation of planning policies must meet new demands under potentially very different climatic and energy conditions. Although such change is often spoken about negatively, it is wrong to assume that the future is bleak and that these challenges will only make hard times bearable—this is also a time of opportunity for Tompkins County. Many of the measures required to reduce our vulnerability to changes in the environment and in the energy economy will serve to actually improve the way we live, the way we travel, and the way we interact within our communities. ITCTC representatives and staff, as members of the community, will work to find win/win solutions in transportation that result in sustainable improvements to the quality of life of Tompkins County residents.