Small City Climate Action Plans.

A Role for Small Cities.

One can easily assume that climate change and actions to mitigate its impacts seem to fall to national and state governments and large corporations. Not so fast... Small cities can strike a vision of a carbon-free city and prepare strategies and actions to meet their vision.

"The Iowa City Climate Action Plan [see chart below] identifies 35 action items critical to meeting the city's emission reduction goals." *Planning, The Magazine of the American Planning Association* in its April 2019 edition offers an article describing the Iowa City program. The City's population is 75,000. The link is <u>www.icgov.org/climateaction</u>.

A **summary table** [below] focuses on 18 actions; some for home, work and government. Each action is rated by cost [low, medium, high] and impact on local greenhouse gases [low, moderate and high]. Actions range from low cost/low impact to high cost/high impact. The magic of the approach is that the high cost – low impact actions can be avoided while the low cost – high impact actions, i.e., the "low hanging fruit", quickly become apparent. Taken one at a time, implementing actions almost become self-evident; either, actions are already being done or they are self-evident things that everyone already knows should be done.

Selected actions from the Summary Table:

Low cost - high impact

- Increase energy efficiency in new buildings.
- Increase employee commuter options.
- Encourage a "plant rich" diet.

Low cost – moderate impact

• Increase bicycle and pedestrian transportation.

Moderate cost – high impact

• Embrace electric vehicles, alternative fuel vehicles and other emerging technologies.

Increase energy efficiency in new buildings.

Most towns are revising zoning and building codes to improve the energy efficiency of homes and offices. Many homebuilders are offering optional energy efficiency upgrades that are migrating into the standard feature category.

Their studies show that solar on the roof is not all that effective and that the real energy savings come from increased insulation and window treatments. Codes with this focus for home, apartments, offices and other buildings can be accomplished straight away.

Increase employee commuter options.

Multi-modal transportation systems have been the objective of local and regional transportation plans forever. Congestion management plans reduce idling time on roadways. Carpooling, bike/ped facilities and ride-share programs work when taken seriously.

Bus service is the key. More glamorous transit options are expensive and ultimately rely on bus route linkages. Monies devoted to transit best focus on better coaches, better headways and better routes. Without this critical piece of the commuter trip, monies will continue to be spent on less effective pieces of the system.

Encourage a "plant rich" diet.

This one sounds pretty esoteric; however, several reasonable programs can be enacted to move our diets away from beef.

The City of Winter Garden, FL, population 45,000, is taking diet, sustainable food hubs and farm to table serious. The City bought the Tucker Ranch and is devoting land to farming that will meet their sustainability and environmental objectives:

Tucker Ranch, Winter Garden FL.

A 16-acre state-of-the-art working farm will be [is being] developed, complete with a community and teaching farm, modern greenhouse, retail store, commercial kitchen, and cold storage. The farm will be a showcase for cutting edge farming technology utilizing permaculture practices along with the establishment of a sustainable food hub to serve the region. All the food grown at Tucker Ranch will be sold to local food outlets and schools, and produce will be sold at the Winter Garden Farmers Market. The city is currently working on developing the farm and restoring native vegetation. http://wintergardenexperience.com/news/ news detail/tucker-ranch

Farmers' markets, teaching farms and participating restaurants can establish a culture of sensitivity to diet. Implementing these programs in school lunches, hospital diets, prison meals and other institutional meal programs expands the program's reach. Progress can be made.

Increase bicycle and pedestrian transportation.

Every city and town is working to expand its bike/ped system. The trick is to consider it a commuting mode of travel rather than strictly recreational. A commuter bike/ped system requires different connections with job centers and facilities for showers, storage and safety.

Embrace electric vehicles, alternative fuel vehicles and other emerging technologies.

Along with improved new building energy efficiency, electric vehicles have got to be considered the most important action any city can take to reduce greenhouse gas emissions. Autonomous vehicles are interesting, but they are not "game changers." Electric vehicles change everything.

Common sense and the US EPA reflect that transportation is the biggest generator of greenhouse gas emissions.

EPA studies show 29% of all emissions come from transportation. Small cities and towns can be active in this area of climate change responses.

- City fleets can be converted over time to phase out internal combustion engines.
- Electric charging stations can become ubiquitous.
- Property tax credits for home installation of charging equipment can be enacted.
- State and federal tax credit programs can be advertised to residents and businesses.
- Employers with large vehicle fleets can be approached for participation.
- Education programs in conjunction with car manufacturers can be established.

Electric vehicles will make a difference.

Conclusions.

Small cities can do what they do best:

- Improve building codes to increase the energy efficiency of homes and offices.
- Start the movement to a total electric car environment throughout their jurisdiction.
- Move to improve the diets of their residents. The environmental and health benefits are self-apparent.
- Increase the use of solar and wind energy sources and help scale up use to strengthen the national energy grid.
- Support bus service that serves commuters; commuters are the prize and the best use of transit monies; especially when supplemented and coordinated with a robust bike/ped home-to-work system.
- **Support regional transit** to add heft to a large-scale systems approach.

Institute local programs and support regional transit, energy, nutrition and building code efforts without abdicating the responsibility of local action. Small city and town actions can be powerful. The City of Iowa City's "Climate Action Plan" has taken climate change seriously. The City has devised a simple yet effective system for evaluating actions to improve conditions; the system provides a balance of effectiveness and cost. As the chart below from *Planning Magazine*, April 2019 indicates, some low cost actions have high climate improvement impacts. Some high cost options are not that effective. LINK: https://www.icgov.org/project/climate-action

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	ADAPTATION		SUSTAINABLE LIFESTYLE	
BUILDINGS TRANSPORTATION WASTE				
ACTION	SECTOR(S) HOME/WORK/GOV'T	COST	LOCAL GREENHOUSE GAS IMPACT	
BUILDINGS	New Contraction		A GATTA TOU MANTAN	
Increase energy efficiency in residences	0	S-S\$\$	Interna Marchine Statistics	
Increase energy efficiency in businesses	0	\$-\$\$\$	INTERNA STREET, DOOLD,	
Increase energy efficiency in new buildings	000	\$	TRACT PROPERTY AND	
Increase on-site renewable energy systems and electrification	000	\$\$	Interiment	
Continue to increase energy efficiency in city-owned buildings		\$-\$\$\$	100000	
TRANSPORTATION				
Increase use of public transit systems	0 0 0	\$-\$\$\$		
Embrace electric vehicles, alternative fuel vehicles, and other emerging technologies	000	\$\$		
Increase bicycle and pedestrian transportation	000	\$		
Increase compact and contiguous development	6	\$\$		
Increase employee commuter options	0	\$		
WASTE				
Reduce waste at the source	00	\$		
Take action on a study to efficiently capture and use methane from wastewater operations		\$		
Take action on a feasibility study on energy generation from landfill methane		\$\$\$		
Develop communications and outreach plan for vulnerable populations		s		
Coordinate extreme weather preparedness planning with local agencies	6	\$	Marcall S	
SUSTAINABLE LIFESTYLE				
Encourage a plant-rich diet*	6	s		
Create funding mechanisms to support community-wide climate action		\$\$\$	-	
Incorporate this Climate Plan into the city's sustainability communications		\$		