

Partha Reddy

Transportation Practices in Denver's Sustainability Initiatives

Citation: Reddy, Partha. 2011. "Transportation Practices in Denver's Sustainability Initiatives." Sustainable Cities Policy Project, www.davidjhess.org.

Copyright Partha Reddy © 2011.

Sustainability initiatives around the world maintain common interests; they increase efficiency and promote a healthier living environment. Often times, however, the social climate is not supportive of such practices. In contrast, the government of Denver has a strong backing from its people, and policy is directly affected by this positive social environment. Therefore Denver has the right tools to become a leader in sustainability practices. The City of Denver's sustainability efforts are channeled through the Greenprint Denver plan. The former mayor of Denver, John Hickenlooper, created this overarching city sustainability program in 2006, and the effects and accomplishments are being tracked through this current year. The strength of Denver's Greenprint plan is the ability to encompass organization and singular governance, yet the lack of innovation and use of newer technologies and ideas to promote sustainability prevents Denver from being the

leader. Denver is establishing itself with the promotion of energy, land use, transportation, waste, and community integration initiatives.

In this next part of the discussion, Denver's major energy initiatives, land use, waste management programs, and food programs will be discussed. From there, a full analysis of Denver's best sustainability practice, a multi-modal transportation system that includes a biking program, a mass transportation system and a city fleet will be investigated. To conclude the critique, there will be a retrospective examination of the practicality and portability of the Greenprint Denver plan.

Practices of Greenprint Denver

Energy initiatives in Denver are focused on solar energy and greening the city fleet. Solar energy is an important aspect of the Denver sustainability initiative, especially because Denver has the fifth greatest solar potential in the United States, with over three hundred sunny days on the calendar. Solar initiatives are funded extensively by the government, and over the past five years, major construction projects and buildings contain massive solar arrays. The Denver International Airport, the Museum of Nature and Science, the Colorado Convention Center, and multiple public schools are homes to these arrays. The public display of these impressive energy creators funnels public opinion towards solar energies. The greening of the Denver fleet is labeled the Green Fleet. Hybrid, fully electric, biodiesel, and CNG vehicles compose the government's fleet. The idea behind this program is that energy independence and conservation starts from the top down.

This practice ties in with the transportation initiatives of Denver, which will be discussed later. (Greenprint Denver)

The Greenprint Denver plan also focuses on capitalizing on Denver's beautiful landscape. Denver has included 9 of 10 sustainable zoning code categories from a recent EPA report to ensure on a logistical level that it is up to date. Furthermore, the Mile High Million program is working to incorporate one million new trees in metropolitan Denver area by the year 2025. An additional greening initiative is Tree by Tree. Unlike Mile High Million that promotes city planning organization, Tree by Tree is completely focused on community integration. By using neighborhoods, schools, and other community oriented staples of society, the Greenprint Denver plan is pushing its land use policies to the individual basis. In this manner, politicians and their constituencies are on the same political and social level, which greatly enhances the probability of widespread agreement on legislation. (City of Denver 2009)

The City of Denver has made vast improvements in both waste management systems and food initiatives in the past few years. Denver prides itself on being a sustainable city, but has struggled with massive amounts of landfill and dealing with recycling and compost. The GreenPrint Denver plan issued in 2006 has dealt with these issues and the effects will be examined later. Additionally, food programs have been addressed with the highest of effort through organizations such as a Denver Urban Gardens and Grow Local Colorado.

Landfills, while not the most threatening environmental effect, play a large role in Denver's initiatives. In fact, the Rocky Mountains have the highest landfilling

rate in the country at eighty eight percent of waste (City of Denver 2009). The Greenprint Denver plan, not only offers some of the basic rebuttals to landfilling like recycling and composting, but also gives innovative and practical techniques like minimizing junk mail and precycling. Junk mail actually accounts for the destruction of about one hundred million trees, and increasing awareness can significantly reduce landfill mass and environmental spill over. Precycle in theory is quite easy: select materials and objects for purchase that are recyclable. By simply taking five extra seconds at the supermarket, an individual can significantly decrease waste going to landfills.

Recycling in Denver, while not a novel idea, is highly organized and very effective. Denver's public recycling is run through Denver Recycles. The organization has created a "Go Purple" initiative that uses a unique and popular purple design of recycling bins and containers to motivate a city-wide push. One can easily check their household's availability on Denver Recycle's website (City of Denver 2011). Accessibility and organization is key, and Denver has established both of these. Coupled with this recycling initiative is Denver Composts, an equivalent organization that uses green bins and containers to promote and create easy composting practices. Composting is essential for Denver to complete its sustainability efforts since approximately fifty eight percent of the material dumped in landfills is organic. (City of Denver 2009) If composting on an individual basis is desired, one can simply visit www.dug.org to sign up for free lessons. (City of Denver 2011, Denver Urban Gardens 2010)

Food programs in Denver revolve around community gardens and food banks. Two types of programs exist in Denver, one with private organization and another public. Grow Local Colorado is a private initiative that offers a meeting place for individuals who would like to be matched in a community garden or a food bank philanthropy. The organization offers seven food banks and six community gardens that are encompassed by Grow Local Colorado. Although the organization partners up with the Denver Parks and Recreation Department, it remains a totally volunteer based project that fails to envelop the whole city. DUG, Denver Urban Gardens, on the other hand, is the supplement to the local initiatives that creates overall organization and a situated program. DUG takes the community garden initiative to a wider population and has government affiliation to provide substantial benefits. (Denver Urban Gardens)

Even though Denver lacks in innovative sustainable practices of waste management and local food initiatives, the overall organization and widespread use of the techniques that the city has instituted is a success story in itself. Denver's waste management programs are all sustained under the government eye. Additionally, food programs are maintained more thoroughly through DUG and Denver's government although a strong local presence is still felt. This encompassing efficiency allows Denver's government to create impressive sustainability measures.

Best Practice: Transportation

Denver prides itself on its long-lasting transportation initiatives, which are the city's most effective area of greening. In fact, Denver has shown a dedication to greening the city's governmental fleet of vehicles since 1993. This early determination has put Denver on the required path towards transportation success. Using the former Mayor John Hickenlooper's GreenPrint Denver plan, Denver has continued to show its leadership of clean and efficient transportation by pursuing green government vehicles, enabling bike use, and creating an overarching mass-transit system.

The Green Fleet is one of Denver's proudest achievements. Perhaps this early determination to green the government has propelled Denver's overall environmental sustainability initiative: "Since the early 1990s, Denver has been on the cutting edge of environmentally-conscious urban technology, and has remained committed to ensuring that the city is as "green" as a city can be. Nowhere is this commitment more apparent than in Denver's Green Fleet" (Visit Denver 2011). The introduction of greener technologies over time to the Denver government has had a positive effect on the citizens of Denver, who are encouraged by the initiatives of their leaders and government programs. Hickenlooper himself can be seen driving a Ford Escape hybrid SUV (City of Denver 2009). Although most vehicles use a B20 biodiesel, the breakdown of all vehicles still includes hybrids, propane, electric, and CNG energies (Visit Denver 2011). This is most likely a realization of the different layers of energy initiatives in Denver's long history of greening its fleet.

Denver's bicycle program has been a large success in the last five years. Operating under Denver Bike Sharing's non-profit charitable organization, B-Cycle is

a comprehensive urban biking share system. At the request of Hickenlooper, B-Cycle still operates independent of the government. The government actively encourages the use of bicycles in the city of Denver: "The Bicycle Commuter Act of 2008 allows for up to \$20 in taxfree benefits per month for employees who bicycle to work" (DenverBikeSharing). According to {bike-sharing.blogspot.com}, Denver was the first American city to create such an expansive bike sharing program within the United States. New York and Boston are both operating with a bike share system opening in 2012. Denver is embracing this change and is promoting the use of bikes: "The city now has 62 miles of trail, 43 miles of bike lanes; 21 miles of sharrows (an on-street bike route); 400 miles of signed bike routes"... and will have "50 stations and 475 bikes in system by October 15" (City of Denver 2009).

The final piece to Denver's transportation solution is FasTracks. This light rail mixed with commuter rail transportation system is a few years under way. Unfortunately, the program is working with a cost overrun of about two billion dollars. With about 119 miles of new rail added to Denver's existing rail, FasTracks is likely to transform the city's transportation system. Because Denver has a problem with sustaining a dense city in terms of population, a commuter rail will surely solve these woes, if not ameliorate them (City of Denver 2009).

Now that Mayor Hickenlooper is out of office, the citizens of Denver must look to new leadership for energy innovations. James Mejjia, a candidate for the mayor position in Denver, provides insight on the sustainability programs of Denver in an article in the *Huffington Post*. His focus stays on the transportation practices

mentioned and his plan, if elected, is to capitalize on these major successes in the city (Mejia2011).

By promoting a bike share program, light rail, and the Green Fleet, Denver clearly uses a multi-modal transportation system. In fact, this is one of the goals that is laid out in the GreenPrint Denver plan to promote lasting sustainability. The ability to give an option of clean transportation is unique in Denver and a recent but important trend in sustainability talks.

Conclusion

The GreenPrint Denver plan has had lasting success for the past five years. The plan builds upon the strengths of Denver as a city and has achieved many of the goals it has set out to achieve, whether it is achieving LEED certifications for buildings or drastically improving air quality. The ability to have a highly organized government that overlooks all aspects of the greening process has led to a highly efficient green machine. Transportation systems have been far and away the most effective initiatives, yet Denver's highly centralized waste management programs, solar energies, and food programs are all laudable.

Despite all the successful attributes the GreenPrint Denver plan can claim, the plan is in its final year of creating initiatives. While some projects are still in the works like the FasTracks network and a few solar arrays, many of the projects have been long accomplished. Denver Recycles and Denver Composts, the Denver B-Cycle program, and the Denver Green Fleet are all programs that have been thoroughly integrated. There is room for improvement of these initiatives, however,

Denver must act soon and reinvigorate the city to capitalize on this recent success. With a social climate that promotes sustainability, Denver can easily remain a leader in sustainability. The citizens of Denver are staunch supporters of the initiatives that the local government is trying to promote (Mejia 2011).

Even though Denver is a unique city with inherent characteristics, its similarities to other Rocky Mountain cities cannot be avoided. Issues such as correcting waste and public transportation remain common in many cities in the area. Thus the “Balanced Energy Capital of the West” has a plan that can be transplanted with editing into other city’s sustainability legislation. Denver’s transportation model can be quite easily used in many other cities that are lagging in the sustainability policy area. (Weathersbee 2008)

References

The Bike Sharing Blog. 2011: <http://bike-sharing.blogspot.com/>

Bulkeley, Harriet. 2003. Cities and climate change [electronic resource] : urban sustainability and global environmental governance. London ; New York : Routledge, 2003.

City of Denver. 2009. “GreenPrint Denver=. 2006-2009.”
<http://www.greenprintdenver.org/>

City of Denver 2011: Denver Recycles.
2011<http://www.denvergov.org/Recycling/tabid/438304/Default.aspx>

Denver Bike Sharing. 2011: <http://www.denverbikesharing.org/sponsorship.php>

Denver Recycles. City of Denver,

Denver Urban Gardens 2010. Denver, the Mile High City.

Hess, David et al. 2010. Building Clean Energy and Green Jobs.
<http://davidjhess.org/>

Mejia, James. Nov 4 2011. Huff Post Denver:: http://www.huffingtonpost.com/james-mejia/denvers-sustainable-future-mejia_b_834892.html

Peterson, D. 2011 Local energy plans in practice [electronic resource] : case studies of Austin and Denver. Golden, CO : National Renewable Energy Laboratory, [2011].
<http://purl.fdlp.gov/GPO/gpo6039>

Visit Denver: Denver's Green Fleet. 2011:
<http://www.denver.org/metro/features/green-fleet>

Weathersbee, Tonyaa. 2008. Denver has some green lessons for Jacksonville.
http://www.jacksonville.com/tu-online/stories/083008/new_324503278.shtml