CHAngemaker
John Gallagher, PE

Transforming Your Community – Road Diets as a Tool to Implement Complete Streets Policies

Complete streets policies have been developed in most urban areas in the U.S. so that roads can accommodate all transportation users, not just cars. The **goals of these efforts** are many:

- Reduce dependence on cars leading to a **reduction in fossil fuel use and our carbon footprint**
- Promote active forms of transportation leading to **healthier lifestyles**
- Improve safety for active transportation modes leading to a **reduction in injuries and fatalities**
- Increase private investment leading to higher **property values and more amenities**
- Increase mobility for the disabled and elderly, leading to a **more equitable society**
- Improve non-vehicular travel for students to and from schools

All these goals lead to an improved quality of life. ***One project can completely transform a neighborhood, and several projects can transform an entire community.***

If we take a deeper look at the use of the road diets as a tool to implement complete streets policies, we should answer the question: "Can complete streets policies be successfully applied to existing urban corridors without additional right-of-way?" The most desirable corridors for complete streets are in existing, densely developed areas where transit, active transportation, bike-share, scooters, and other non-car travel modes are in demand. Central business districts and college campuses are good examples of where these modes are more heavily used and could be further advanced by complete street implementation. However, **existing corridors in these areas have two main roadblocks to complete street implementation: heavy peak-hour vehicular volumes and buildings built relatively close to the existing sidewalk**. Some agencies have successfully eliminated on-street parking to provide room for bike lanes or other complete street initiatives. However, this rarely leads to a full complete street conversion. It can be unpopular with adjacent businesses dependent on parking and can negatively impact the pedestrian experience.

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Can a four-lane, two-way street be converted to a three-lane street? Or to a two-lane street? Can a multi-lane, one-way street function with one less lane? All these lane reductions, or road diets, are physically possible, but at what cost? Will modifications lead to a significant increase in congestion if most drivers continue to use their cars? This is the concern of most transportation agencies and the public.

Road diets, through the reduction of pavement width, come with their own set of benefits. Some are the same as complete street benefits, but others are unique to road diets:

- Improved vehicular and non-vehicular safety due to **reduced speeds**
- **Improved pedestrian street-crossing safety** due to a decrease in the crossing distance
- **Improved transit viability** due to safer non-vehicular travel to and from transit stops
- **Decreased street maintenance costs** due to reduced roadway area

Most agencies find that many roadways in a central business district or campus are at or over capacity. However, there are almost always roadways that can handle more vehicles without a proportional increase in congestion. If a road diet is implemented as a tool to provide a complete street, we have found that drivers will divert to other lesser traveled roads leaving the new complete street with about the same levels of peak-hour congestion. However, the traffic flow will feel much more acceptable because the speed has been reduced, and there is less overall volume.

CHA has used travel-demand modeling to show that diverted vehicles are not a concern in many cases and that a road diet can be used to implement a complete street. This modeling often indicates that the **overall average delay in an area is impacted very little by the road diet**. We have also completed **extensive traffic capacity analysis and traffic simulations** to support the case for communities considering a road diet. **These are also useful tools for showing the public *before* and *after* scenarios to obtain buy-in and support for the road diet.**

Complete streets and road diets have proven successful in many communities and are the direction urban areas are going. They can transform a community and bring new opportunities to its residents and businesses.

About the Author: John Gallagher, PE, is the Vice President and Business Practice Leader of Traffic & ITS at CHA Consulting, Inc. He has over 30 years of experience in traffic engineering and transportation planning. His wide-ranging expertise covers safety, operations, and design, including complete streets and road diets. Mr. Gallagher has worked on more than 400 traffic and planning studies. He has been the project manager for numerous design projects, which implemented the recommendations of those studies. His work experience includes state DOT, local government, private consulting, and running his own firm. He is currently a member of the Mid-Ohio Regional Planning Commission's Complete Streets Policy Committee. You can reach John at **JGallagher@chacompanies.com**.