



TOD and HEALTH

What is TOD? What is the purpose of TOD? ⁱ

Transit Oriented Development (TOD) is the development of compact, walkable communities centered around high quality transit systems. This type of design makes it possible to live a healthier life without complete dependence on a car for mobility.

TOD communities are designed to

- Enable the easy use of bicycles, scooters, and rollerblades
- Integrate transit systems including trolley, streetcars, and buses
- Reduce and manage parking within a ten minute walk circle around a town center or train station

The main purpose of TOD is to increase the quality of life for residents in the area by providing better places to live, work, and play. TOD can also increase transit ridership, which can help alleviate traffic congestion, reduce car accidents, and decrease pollution. It also promotes a healthier lifestyle by creating infrastructure that supports walking and biking. TOD is a new fast growing trend that can create vibrant, livable communities.

Health Benefits “Snapshot”

1. Reduces driving
 - Reduces environmental pollution (asthma, environmental mutation/defects)
 - Encourages alternate “active” modes of transportation: walking to bus stops, train stations, etc. (decrease obesity, heart disease)
 - Reduces automobile accidents (injuries and death)
2. Increases safety
 - Reduces likelihood of walking in dimly lit streets (decrease crime and assault)
 - Public enforcement can focus on highly populated areas (decrease crime and assault)
3. TOD can increase regular physical activity
 - Convenience of stops encourage people to visit parks, go out, fresh air (decrease obesity, heart disease)
 - Convenience of stores encourages walking (decreases driving)
4. Increase access to fresh foods
 - Convenience of stops connected to markets where fresh produce is sold, increase dietary nutrients and variety (decrease obesity, heart disease) and reduces transportation barriers to access fresh foods

Increase physical activity ⁱⁱ

Research shows regular exercise/physical activity provides substantial benefits in reducing morbidity and mortality from several chronic diseases in adults, particularly cardiovascular disease.

TOD can increase physical activity by promoting access to:

- community activities and community sports teams,
- biking and hiking paths,
- parks and other areas of outdoor recreation,
- promoting walking,
- minimizing use of personal vehicles.



This document was created in partnership with the County of San Mateo Health Department and the University of California Berkeley’s Undergraduate Public Health Coalition. For more information, please contact Angela Sajuthi, Health Policy and Planning, at (650) 573-2737 or asajuthi@co.sanmateo.ca.us.

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Community benefits ^{iv}

1. TOD reduces the number of private cars on the street (less traffic and safer streets)
2. TOD motivates bicycling and walking. For example, Copenhagen, Denmark contains 186 miles of cycling paths. As a result, 30% of commuters use bicycles to get to work daily.
3. Parking is centralized around public transportation hubs (less need for huge parking structures scattered throughout city).
4. Large-scale pedestrian areas are beneficial for businesses.
5. Encourages high-density development that allows key buildings (town hall, libraries, restaurants, etc.) to be within walking distance of each other, which creates community connectedness.

Environmental benefits

1. Increased use of public transportation decreases exhaust fumes and carbon outputs from personal cars.
2. The organization of a community can promote neighbor carpooling.
3. The need for personal cars can decrease and used cars will take up less landfill space.
4. Increased use of public transportation promotes development of new systems of rapid transit and perpetuate the positive cycle of TOD.

Potential health consequences ⁱⁱⁱ

The redesign of residential communities in accordance to TOD goals has the potential to recreate various health risks and mitigate many of the aforementioned benefits through the active redesign of established communities; including:

- Housing located in closer proximity to busy roadways and the resulting automotive produced air pollution.
- Increases in the frequency of chronic lower respiratory diseases. These conditions are associated with air pollution. Regular exposure to toxics often more prevalent near highways, roadways and areas of high traffic.
- Increases in pedestrian injuries and deaths caused by car accidents as a result of increased “mixing”.
- Displacement and disruption of established communities resettling in isolation and lack of individual and/or family supports; most often impacting low-income residents.
- Loss of affordable housing units as a result of building “more desirable” and therefore often higher cost housing.
- Decrease in social capital as a result of community displacement.

ⁱ <http://www.transitorienteddevelopment.org/>

ⁱⁱ Harsha, DW “The Benefits of Physical Activity in Childhood.” Am J. Med Sci. December 1995

ⁱⁱ Sallis, JF “A Review of Correlates of Physical Activity of Children and Adolescents”. Sci. Sports Exerc., Vol. 32, No. 5, pp. 963-975, 2000.

ⁱⁱ Brownson, RC “Promoting Physical Activity in Rural Communities Walking Trail Access, Use and Effects.” American Journal of Preventive Medicine, Vol. 18, Issue 3, pp. 235-241.

ⁱⁱⁱ Litman, Todd. “Integrating Public Health Objectives in Transportation Decision-Making”. Victoria Transportation Policy Institute. March 19, 2003.

ⁱⁱⁱ Fullilove, Mindy Thompson. Psychiatric Implications of Displacement: Contributions From the Psychology of Place. American Journal of Psychiatry; Dec 1996; 153, 12; PA Research II Periodicals pg. 1516.

ⁱⁱⁱ Fullilove, Mindy Thompson. Promoting Social Cohesion to Improve Health. JAMWA. Vol. 53, No. 2, p 72-76.

^{iv} Bernick, Michael, and Robert Cervero. Transit Villages in the 21st Century. New York, New York: McGraw-Hill, 1997.

^{iv} Richards, Brian. Future Transport in Cities. New York, New York: Spon Press, 2001.