

## **Resolution # 12-??**

**A RESOLUTION OF THE CITY COUNCIL PROVIDING FOR A COMPLETE STREETS POLICY AND DIRECTING STAFF TO DEVELOP IMPLEMENTATION STRATEGIES TO INCREASE THE USABILITY OF ALL STREETS FOR ALL MODES OF TRAVEL FOR CITIZENS OF ALL AGES AND ABILITIES IN BETHEL.**

**WHEREAS**, The City of Bethel wishes to ensure that all users of our transportation system are able to travel safely and conveniently on all streets and roadways within the public right-of-way in Bethel; and

**WHEREAS**, a complete street is defined as one which provides a safe, convenient, and context-sensitive facility for all modes of travel, for users of all ages and all abilities; and

**WHEREAS**, complete streets better serve the needs of those who use transit by providing access to transit systems; and

**WHEREAS**, complete streets have public health benefits, such as encouraging physical activity and improving air quality, by providing the opportunity for more people to bike and walk safely; and

**WHEREAS**, complete streets improve access and safety for those who cannot or choose not to drive motor vehicles; and

**WHEREAS**, complete streets are essential in providing safe routes to school for children; and

**WHEREAS**, complete streets policies have been adopted legislatively by at least five states, and by at least 36 localities – of which 13 are by local law (resolutions or ordinances); and

**WHEREAS**, the City of Bethel currently has a limited complete streets policy; and

**WHEREAS**, it is the desire of the City of Bethel to formalize a commitment to the principles of complete streets for all of our streets;

**NOW THEREFORE BE IT RESOLVED**, by the City Council of Bethel Alaska as follows: that Bethel commits to a Complete Streets Policy which has the following elements:

1. Any roadway in the City of Bethel which is to be newly constructed or completely reconstructed must be designed and constructed to
  - a. Provide for the safety and convenience of all users of all ages and of all abilities: pedestrians, bicyclists, transit users, and motorists; and
  - b. Address the needs of all users both along roadway corridors and crossing the corridors.

2. Any project in which an existing roadway surface is to be restored or rehabilitated, and any remediation of deficient or non-existent sidewalks, shall be reviewed for the potential of making the roadway a complete street. Consideration shall particularly include proportionality: is the scope of work needed to make a complete street reasonable in relation to the scope of the proposed roadway maintenance or improvement?
3. Any exception to applying this Complete Streets Policy to a specific roadway project must be approved by the City Council, with documentation of the reason for the exception.
4. An annual report will be made to the City Council by the City Administration showing progress made in implementing this policy.

**AND BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE SAID CITY OF BETHEL**, that this Complete Streets Policy will apply to the scoping, design, and construction of projects.

**AND BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE SAID CITY OF BETHEL**, that the Public Works Department will review current design standards which apply to new roadway construction, to assure that they reflect the best available design standards and guidelines, and effectively implement the Complete Streets Policy above stated.

**AND BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE SAID CITY OF BETHEL**, that these design standards also serve as guidance for all existing roadway rehabilitation, reconstruction, or resurfacing, to the extent that the work required is reasonably proportional to the scale of the proposed rehabilitation, reconstruction, or resurfacing.

**AND BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE SAID CITY OF BETHEL**, that application of design standards will be flexible to permit context-sensitive design, fitting the roadway design within the context of the neighborhood, recognizing that all streets are different and user needs will be balanced.

**AND BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE SAID CITY OF BETHEL**, that staff in the Public Works Department be directed to develop ordinances, resolutions, programs, and recommendations for funding to implement the Complete Streets Policy, for consideration by the City Council; and that these shall identify the complete streets needs and recommend a plan to meet those needs, including for sidewalks, throughout the city.

**AND BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE SAID CITY OF BETHEL**, that the City Council commits to including Complete Streets Policy and principles in all future City plans.

**ENACTED THIS \_ DAY OF \_ 2012, BY A VOTE OF \_ IN FAVOR AND \_ OPPOSED.**



Complete Streets are designed and operated so they work for all users—pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Communities that adopt complete streets policies are asking transportation planners and engineers to consistently design and alter the right-of-way with all users in mind. Contact the National Complete Streets Coalition ([www.completestreets.org](http://www.completestreets.org)) to learn about the diverse groups working together to enact complete streets policies across the country!

# Complete Streets Improve Safety for Everyone

Virginia Noll came home from grocery shopping in Wilkes-Barre, Pennsylvania on June 11, 2009. As she crossed South Washington Street around 5:30 pm from the bus stop to the senior housing apartments where she lived, she was fatally struck by an SUV. Her neighbors had warned her not to go out, fearing the 88-year-old would be hit while crossing a street.<sup>1</sup>



Incomplete streets can create a dangerous environment for people outside of cars.



Right: Dan Burden  
Left: Dan Burden

## Incomplete streets put people at risk

Streets without safe places to walk, cross, catch a bus, or bicycle put people at risk. Over 5,000 pedestrians and bicyclists died on U.S. roads in 2008, and more than 120,000 were injured.<sup>2</sup> Pedestrian crashes are more than twice as likely to occur in places without sidewalks; streets with sidewalks on both sides have the fewest crashes.<sup>3</sup> While the absolute numbers of bicyclists and pedestrians killed has been in decline for the decade, experts attribute this in part to a decline in the total number of people bicycling and walking.

Of pedestrians killed in 2007 and 2008, more than 50% died on arterial roadways, typically designed to be wide and fast.<sup>4</sup> Roads like these are built to move cars and too often do not have meet the needs of pedestrian or bicyclist safety. More than 40% of pedestrian fatalities occurred where no crosswalk was available.<sup>5</sup>

A recent study comparing the United States with Germany and the Netherlands, where complete streets are common, found that when compared per kilometer traveled, bicyclist and pedestrian death rates are two to six times higher in the United States. Complete streets therefore improve safety indirectly, by encouraging non-motorized travel and increasing the number of people bicycling and walking. According to an international study, as the number and portion of people bicycling and walking increases, deaths and injuries decline.<sup>6</sup> This is known as the safety in numbers hypothesis: more people walking and biking reduce the risk per trip.

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## The Benefits of Complete Streets 9



### Complete Streets Steering Committee Organizations

AARP  
Alliance for Biking and Walking  
America Bikes  
America Walks  
American Council of the Blind  
American Planning Association  
American Public Transportation Association  
American Society of Landscape Architects  
Association of Pedestrian and Bicycle Professionals  
City of Boulder  
HNTB  
Institute of Transportation Engineers  
League of American Bicyclists  
McCann Consulting  
National Association of Area Agencies on Aging  
National Center for Bicycling and Walking  
Safe Routes to School National Partnership  
Smart Growth America  
SvR Design Company

### National Complete Streets Coalition

1707 L St NW, Suite 1050  
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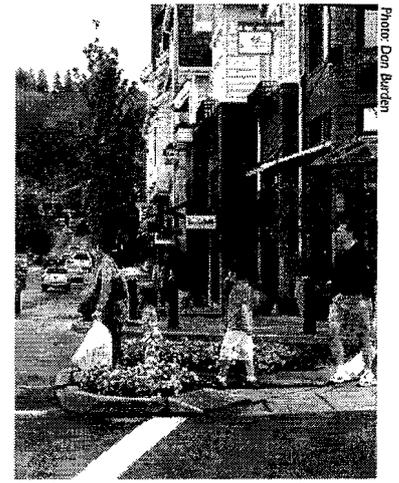
# Complete Streets Improve Safety for Everyone

## Complete streets help reduce crashes

Complete streets reduce crashes through comprehensive safety improvements. A Federal Highway Administration review of the effectiveness of a wide variety of measures to improve pedestrian safety found that simply painting crosswalks on wide high-speed roads does not reduce pedestrian crashes. But measures that design the street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers – all improve pedestrian safety.<sup>7</sup> Some features, such as medians, improve safety for all users: they enable pedestrians to cross busy roads in two stages, and reduce left-turning motorist crashes to zero, a type of crash that also endangers bicyclists.

One study found that designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28%.<sup>8</sup> Speed reduction has a dramatic impact on safety for all road users, reducing both the number and seriousness of crashes. Eighty percent of pedestrians struck by a car going 40 mph will die; at 30 mph the likelihood of death is 40 percent. At 20 mph, the fatality rate drops to just 5 percent.<sup>9</sup> Roadway design and engineering approaches commonly found in complete streets create long-lasting speed reduction. Such methods include enlarging sidewalks, installing medians, and adding bike lanes. All road users – motorists, pedestrians, and bicyclists – benefit from slower speeds and better design.

Complete streets encourage safer bicycling behavior. Sidewalk bicycle riding, especially against the flow of adjacent traffic, is more dangerous than riding in the road due to unexpected conflicts at driveways and intersections. A recent review of bicyclist safety studies found that the addition of well-designed bicycle-specific infrastructure tends to reduce injury and crash risk. On-road bicycle lanes reduced these rates by about 50%.<sup>10</sup>



Complete streets create a safe environment for all users.

<sup>1</sup> Skrapits, Elizabeth. "Pedestrian Killed on South Washington Street in Wilkes-Barre." *Wilkes-Barre Citizens Voice*. 12 June 2009.

<sup>2</sup> National Highway Traffic Safety Administration. (2009). *Traffic Safety Facts: 2008 Data*. Available at <http://www.nrd.nhtsa.dot.gov/Cats/listpublications.aspx?ld=A&ShowBy=DocType>

<sup>3</sup> B.J. Campbell, et al. (2004). *A Review of Pedestrian Safety Research in the United States and Abroad*, Federal Highway Administration Publication # FHWA-RD-03-042.

<sup>4</sup> Ernst, Michelle and Lilly Shoup. (2009). *Dangerous by Design*. Transportation for America and the Surface Transportation Policy Partnership.

<sup>5</sup> Ibid.

<sup>6</sup> Jacobsen, P.L. (2003). "Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Biking." *Injury Prevention* 9 (2003): 205-209.

<sup>7</sup> B.J. Campbell, et al.

<sup>8</sup> M.R. King, J.A. Carnegie, and R. Ewing. "Pedestrian Safety Through a Raised Median and Redesigned Intersections" *Transportation Research Board* 1828 (2003): 56-66.

<sup>9</sup> W.A. Leaf and D.F. Preusser. "Literature Review on Vehicle Travel Speeds and Pedestrian Injuries Among Selected Racial/Ethnic Groups," US Department of Transportation, National Highway Traffic Safety Administration (1999).

<sup>10</sup> Reynolds, Conor, et al. (2009). *The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: A Review of the Literature*. *Environmental Health*, Vol. 8, No. 47.

## The Benefits of Complete Streets 4



Complete Streets are designed and operated so they work for all users—pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Communities that adopt complete streets policies are asking transportation planners and engineers to consistently design and alter the right-of-way with all users in mind. Contact the National Complete Streets Coalition ([www.completestreets.org](http://www.completestreets.org)) to learn about the diverse groups working together to enact complete streets policies across the country!

# Complete Streets Promote Good Health!

In Moses Lake, Washington, the community has adopted a Healthy Communities Action Plan, in direct response to a 127% increase in the adult obesity rate there. New zoning rules require wider sidewalks and other features that improve accessibility for pedestrians and cyclists.<sup>1</sup>



Right: [www.pedbikeimages.org/David-Crites](http://www.pedbikeimages.org/David-Crites)  
Left: Dan Burden

When streets provide adequate access to bicyclists and joggers, people are more likely to be physically active.

## Incomplete streets restrict physical activity

When streets are designed only for cars, they deny people the opportunity to choose more active ways to get around, such as walking and biking. Even where sidewalks exist, large intersections and speeding traffic may make walking unpleasant or even unsafe - discouraging any non-motorized travel.

Obesity in America has reached epidemic proportions in recent years. The latest data show that 32% of adults are obese,<sup>2</sup> the number of overweight or obese American children nearly tripled between 1980 and 2004.<sup>3</sup> Health experts agree that a big factor is inactivity – 55 percent of the U.S. adult population falls short of recommended activity guidelines, and approximately 25 percent report being completely inactive.<sup>4</sup> Inactivity is a factor in many other diseases, including diabetes, heart disease, and stroke. Incomplete streets mean many people lack opportunities to be active as part of daily life.

Post World War II growth patterns and street designs tend to favor the automobile over walking and bicycling. The health impacts are clear - one study found that, on a daily basis, each additional hour spent driving is associated with a 6% increase in the likelihood of obesity, while each additional kilometer walked is associated with a 5% reduction in this likelihood.<sup>5</sup>

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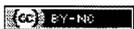
## The Benefits of Complete Streets 4



### Complete Streets Steering Committee Organizations

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America Bikes  
America Walks  
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## Complete Streets Promote Good Health!



Right: Don Burden  
Left: Don Burden

Providing a safe environment for children to go outside and play is essential to combat the epidemic of childhood obesity.

### Complete streets make active living easy

Complete streets provide opportunities for increased physical activity by incorporating features that promote regular walking, cycling and transit use into just about every street. A report prepared by the National Conference of State Legislators found that the most effective policy avenue for encouraging bicycling and walking is incorporating sidewalks and bike lanes into community design – essentially, creating complete streets.<sup>6</sup> The continuous network of safe sidewalks and bikeways provided by a complete streets policy is important for encouraging active travel.

Public health researchers recommend building more sidewalks, improving transit service, and shifting highway funds to create bike lanes to encourage more physical activity.<sup>7</sup> One study found that 43% of people with safe places to walk within 10 minutes of home met recommended activity levels; among those without safe places to walk just 27% met the recommendation.<sup>8</sup> Residents are 65% more likely to walk in a neighborhood with sidewalks.<sup>9</sup>

Walkability has a direct and specific relation to the health of residents. A comprehensive study of walkability has found that people in walkable neighborhoods did about 35-45 more minutes of moderate intensity physical activity per week and were substantially less likely to be overweight or obese than similar people living in low-walkable neighborhoods.<sup>10</sup>

Easy access to transit can also contribute to healthy physical activity. Nearly one third of transit users meet the Surgeon General's recommendations for minimum daily exercise through their daily travels.

A community with a complete streets policy ensures streets are designed and operated to make it easy for people to get physical activity as part of their daily routine, helping them stay trim, avoid heart disease, and receive the many other benefits of physical activity.<sup>11</sup> DuPage County, Illinois adopted its complete streets policy as a health measure, calling it their "Healthy Streets Initiative" and the Tacoma-Pierce County Board of Health (WA) adopted a resolution urging all Pierce County municipalities adopt and implement Complete Streets policies to promote healthy living.

Footnotes on following page or online at [www.completestreets.org/factsheets](http://www.completestreets.org/factsheets)

[www.completestreets.org](http://www.completestreets.org)

## The Benefits of Complete Streets 4



## Complete Streets Promote Good Health!

- <sup>1</sup> U.S. Center for Disease Control and Prevention, 2006.
- <sup>2</sup> U.S. CDC. (2006) *Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Disease and Obesity*.
- <sup>3</sup> U.S. CDC. (2004) *Physical Activity and the Health of Young People*.
- <sup>4</sup> U.S. Dept. of Health and Human Services (2000) *Healthy people 2010*. 2nd edition. Washington, DC: U.S. Government Printing Office.
- <sup>5</sup> Frank, L.D. et al (2004) *Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars*. *American Journal of Preventative Medicine* 27:2.
- <sup>6</sup> Teach Robbins, L., Morandi, L. *Promoting Walking and Biking: the Legislative Role*. NCSL, December 2002.
- <sup>7</sup> Brennan-Ramirez, L et al. "Indicators of Activity-Friendly Communities: An Evidence-Based Consensus Process" 2006. *American Journal of Preventive Medicine*, Volume 31, Issue 6
- <sup>8</sup> Powell, K.E., Martin, L., & Chowdhury, P.P. (2003). *Places to walk: convenience and regular physical activity*. *American Journal of Public Health*, 93, 1519-1521.
- <sup>9</sup> Giles-Corti, B., & Donovan, R.J. (2002). *The relative influence of individual, social, and physical environment determinants of physical activity*. *Social Science & Medicine*, 54 1793-1812.
- <sup>10</sup> Sallis, James F, et al. *Neighborhood built environment and income: Examining multiple health outcomes*. *Social Science and Medicine* 68(2009): 1285-1293.
- <sup>11</sup> Besser, L. M. and A. L. Dannenberg (2005). *Walking to public transit stops to help meet physical activity recommendations*. *American Journal Of Preventive Medicine* 29(4): 273-280.

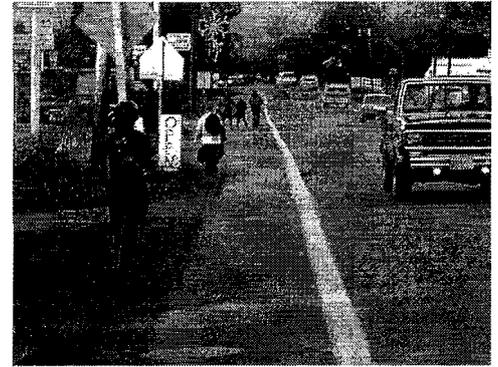
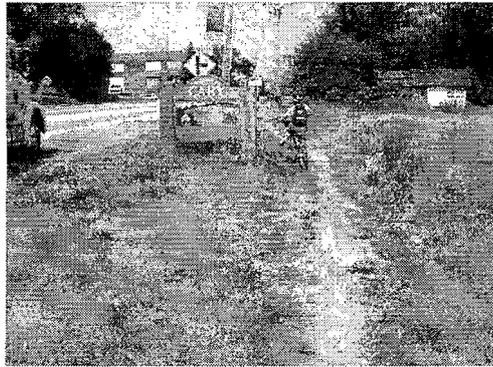
## The Benefits of Complete Streets I



Complete Streets are designed and operated so they work for all users—pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Communities that adopt complete streets policies are asking transportation planners and engineers to consistently design and alter the right-of-way with all users in mind. Contact the National Complete Streets Coalition ([www.completestreets.org](http://www.completestreets.org)) to learn about the diverse groups working together to enact complete streets policies across the country!

# Complete Streets Help Keep Kids Safe!

Outside Philadelphia, two students who attend Uwchlan Hills Elementary School ride the bus only 90 yards to cross a busy street. In Auburn, Maine, students living just down the street from their brand new elementary school are also taking the bus. These schools are missing the necessary sidewalks and crosswalks that allow kids to walk to school safely – their streets are incomplete.



Right: Photo courtesy of Michael Romkin  
Left: Photo courtesy of League of Illinois Bicyclists

These children clearly do not have a safe route to school. The incomplete streets pictured make their trip unappealing and unsafe.

## Incomplete streets a barrier for children

When streets are designed only for cars, they become barriers for children, who cannot safely walk or bicycle along or across them. Unfortunately these safety fears are well founded – pedestrian injury is a leading cause of unintentional, injury-related death among children, age 5 to 14.<sup>1</sup>

As a result, many children end up in the back seat of the car, missing out on opportunities for independence and physical activity. One recent survey found that, while 71% of adults walked or rode their bicycles to school as a child, a mere 17% of their own children currently do so.<sup>2</sup> While 'stranger danger' is often cited as a primary factor, a CDC survey found that traffic-related danger is a more common reason children did not walk to school.<sup>3</sup> Limited physical activity is a factor in the obesity epidemic among children. The number of overweight or obese American children nearly tripled between 1980 and 2004.<sup>4</sup>

The lack of complete streets is perhaps best illustrated by hazard busing for schoolchildren. In Illinois, 15% of students who ride the bus to school do so because it is considered too dangerous to walk from home, less than 1.5 miles away.

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## The Benefits of Complete Streets I



### Complete Streets Steering Committee Organizations

AARP

Alliance for Biking and Walking

America Bikes

America Walks

American Council of the Blind

American Planning Association

American Public

Transportation Association

American Society of

Landscape Architects

Association of Pedestrian and

Bicycle Professionals

City of Boulder

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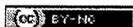
### National Complete Streets Coalition

1707 L St NW, Suite 1050

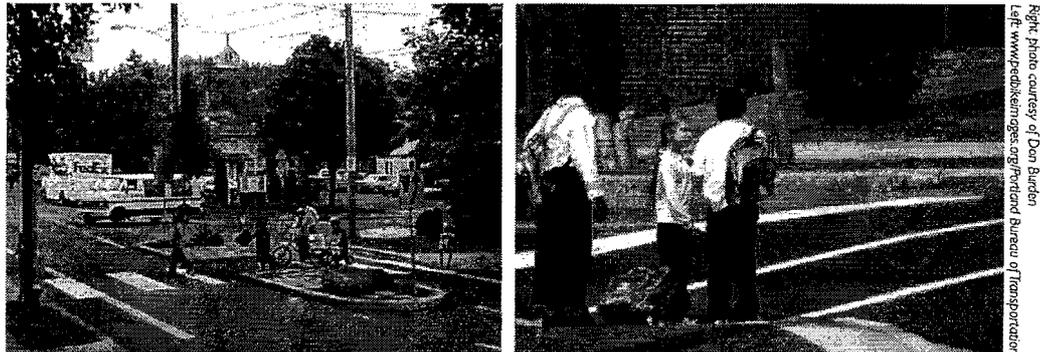
Washington, DC 20036

(202) 207-3355

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## Complete Streets Help Keep Kids Safe!



Right photo courtesy of Dan Burton  
Left photo www.pedalkid.org/Pedestrian Bureau of Transportation

Complete streets provide children with a safe and pleasant environment to walk or bike.

### Complete Streets give children safety, mobility

Complete streets provide children with opportunities to walk, bike and play in a safe environment. More children are likely to walk or bike to school when sidewalks or footpaths are present, when there are safe street crossings, and when school zones enforce a reduced vehicle speed.<sup>5</sup> Streets that provide dedicated space for bicycling and walking help kids get physical activity and gain independence.

Safe Routes to School (SRTS) programs, which have become tremendously popular across the country, will benefit from complete streets policies that help turn all routes into safe routes. The California program, initiated through legislation in 2000, was an immediate success, with more kids walking to school, reduced traffic speeds near schools, and more drivers yielding to pedestrians.<sup>6</sup> While federal funding is now available in all fifty states for Safe Routes to School programs, it only serves a limited number of communities each year. Complete streets policies can augment these programs to help all communities create safe routes as a routine part of roadway improvement, design and construction.

A community with a complete streets policy considers the needs of children every time a transportation investment decision is made. Roads near schools and in residential neighborhoods are designed and altered to allow children, the most vulnerable users of our streets, to travel safely.

<sup>1</sup> Surface Transportation Policy Project (2004) Mean Streets

<sup>2</sup> Appleyard, B. (2005) Livable Streets for Schoolchildren. NCBW Forum.

<sup>3</sup> S Martin, S Carlson, Barriers to Children Walking to or From School—United States, 2004M MMWR. 2005; 54:949-952.

<sup>4</sup> U.S. Centers for Disease Control & Prevention. (2004) Physical Activity and the Health of Young People.

<sup>5</sup> Ewing, R, Will Schroeder, William Greene. School location and student travel: Analysis of factors affecting mode choice. Transportation Research Record: Journal of the Transportation Research Board, No. 1895, TRB, National Research Council, Washington, D.C., 2004, pp. 55-63.

<sup>6</sup> Appleyard, B. (2005)