Proximity to Transport is a Health, Gender and Equity Issue...

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This year the Department of Health (Department of Health, 2011) released a dataset on Local Government Area performance in 2009 against a whole range of indices that impact health. Information on the data was promoted to Community and Social Planning Network (CASPN) members in a collation ‘Top Fifteen Data sources for Describing Community Wellbeing in Victoria’ (Pope, J., 2011).

According to DPCD, ‘Every year the Department of Health compiles data from a wide range of sources for LGA’s and towns/suburbs’. Included a list of topics covered in the health data set. Although there was no mention transport, there is gold in this data, providing evidence of statistically significant linkages between access to public transport and human health outcomes.

Recently I was manipulating data from this same Health dataset for linkages between physical activity and green space in Victoria. This provides interesting reading. But maybe the most striking piece of data, and one providing the most cogent evidence of a link between physical activity and a physical asset that encouraged physical activity, was the data for the percentage of residents within 400m of a public transport stop. In this data a percentage of people within 400m of a bus stop was recorded regardless of what type of stop it was, when the transport ran, how many modes a person had access to within the 400m or whether that stop only took school children for every local government area. Data was also provided on persons not undertaking daily physical requirements and life expectancy for both males and females.

The story can be understood best by following the fairly dramatic trend line charts below. Chart 1 illustrates the decrease in people not meeting daily physical activity requirements [note the double negatives] with an increase of households in walkable proximity of public transport in Victoria. The increase is dramatic. The trend line illustrates that for every additional 1% of households within 400m of a stop there is an approximately 2% overall in-
crease in persons meeting their daily physical activity requirements.

The results are not gender neutral. Figure 2 indicates the impact on females from not being proximate to public transport. For a 30% increase in households within the catchment an additional 25% of female would meet the daily physical activity requirements. For males the ratio is even better, running at one for one.

Charts 4 and 5 illustrate the differences to not undertaking daily physical activity requirements have on life expectancy on males and females in Victoria. For females there is a two-year increase in life expectancy with every 5% increase in the population meeting the physical activity guidelines. For males the picture is different. Chart 4 illustrates the slight but visible decrease in life expectancy over as the percentage of males not meeting the daily physical activity requirements grow. As a measure then access to public transport could have a bigger impact on male physical activity levels impact and a very significant impact on female life expectancy.

Charts 6 illustrates the linkages between life expectancy and proximity to public transport for females. This illustrates that for every 10% increase in females proximate to public transport there is a 2 year increase in female life expectancy, replicating the trend line for physical activity increase in Chart 1.

And if you thought access to public transport was just a womens’ issue, believe me its not. Chart 7 illustrates the connection between male life expectancy and proximity to public transport.
expectancy and female inactivity. If 2.5% of women increased their daily physical activity levels to the daily requirements, this can add up to 10 years increase in a male life span.

The take home message is proximate transport access is an important health issue. It is not a gender neutral either. It matters to males and females differently and for very different reasons. The role of women modeling and promoting physical activity to their sons and husbands should not be underestimated. Overall it is life affirming for everyone.

Are there lessons in this?

Using an evidence base is useful. It requires a mature, more complex and nuanced approach to the planning environment and interdisciplinary cooperation between land-use, social and transport planners adn urban designers.

Getting it right provides significant benefits to human health if we take the time to work together.

Repeating bad old ways, and adversely impacting health by our practice, would seem at least outdated.

**Bibliography**


Chart 5
Male Life expectancy and females not meeting daily physical activity requirements.

Chart 6
Percentage of persons near Public Transport and Female Life Expectancy.
Chart 7
Females not meeting Daily Physical Activity Guidelines and Male Life Expectancy