

CAN PUBLIC TRANSPORTISATION AND/OR DENSIFICATION ACHIEVE TRANSPORT EFFICIENCIES?

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ABSTRACT :

Urban Resource Management practice in New Zealand widely adopts the half-century old American architect-driven style of town planning known today as “Smart Growth”. Of all the justifications claimed for it, this paper addresses those relating to transport’s resource consumption and environmental effects : **(i)** that reconstructing a city within a “metropolitan urban limit” to achieve densification can ensure that vehicular travel per capita does not increase, **(ii)** that public transport is more energy-efficient and creates less detrimental environmental effects than cars, **(iii)** that public transportisation can contribute significantly to avoidance of global warming, **(iv)** that rail transit is an essential component of a public transport system, and in any case building roads just encourages more traffic even if we could build our way out of congestion which we can’t; - together these warrant diversion of road taxes to fund transit’s capital and running costs, and conversion of general roadspace for buses only, **(v)** that in any case radial public transport routes and (especially) rail stations are necessary foci for densification, contributors to a quality urban form especially including recentralisation, and a means of inter-accessing public transport stops throughout the city via a central inter-connection terminus, **(vi)** that pursuance of “Smart Growth”-style densification and public transportisation will together enable congestion to be reduced on existing roads.

While there are very few competent studies into any of these areas which have general value beyond the particular city studied, such indicative studies as are available for western new world cities (ie low density, progressive and heavily automobilised) such as New Zealand’s, together with logical argument, indicate a general lack of substance to all these claims, and in some cases indicate that the opposite obtains. Which raises the question : why are they pursued?

PAPER OUTLINE

The “Smart Growth” planning construct

Densification’s effect on automobility effects

Environmental effects by travel mode

Public transportisation and the prevention of runaway climate change

Effects of diverting road development funds to public transportisation

Centralising radial (transit-oriented) urban form versus decentralising (road) grid form

Public transportisation’s effect on road congestion.

Summary of “Smart Growth”’s effects on transport and the economy

So why Smart Growth?