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Why a Cycling Strategy on its own will NOT Increase Cycling

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Abstract:

With the recent shift in Government transport policy, more and more local councils are developing cycling strategies for their districts. However, a significant increase in cycling is not likely if such strategies are implemented in isolation from other council policies and actions. This is particularly a concern in locations where it appears that "providing for cyclists" is being interpreted as just "providing cycle facilities".

A number of existing cycling strategies have certainly been fairly limited in both their scope of cycling-specific issues (such as education and promotion) and in their actual implementation. However, to really encourage more cycling, councils also need to seriously review and implement other "sustainable transport-friendly" policies for land use planning, speed limits, general road construction and maintenance, parks & reserves planning, travel demand management, traffic calming, and parking management, to name but a few.

This paper discusses some of the pitfalls observed in local council cycling strategies and policies to date. It also identifies other policy areas that have an impact on cycling and suggests practical ways that councils can truly make a difference to encouraging more cycling.

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Introduction

The title of this paper may seem a little provocative, particularly given the general desire to see more cycling strategies developed and implemented by councils around the country. The purpose however is to sound a bit of a warning to anyone who expects that a cycling strategy will automatically be the catalyst to get cycling moving in their district. It is probably a *necessary* part of developing the groundwork to achieve this; however I would argue that it is not *sufficient* on its own.

The existing cycling strategies themselves vary in their breadth and implementation success. I will discuss some of the (potential) pitfalls observed in district cycling strategies and policies to date, and how to resolve them. More importantly however, I'll also identify other policy areas that have an impact on cycling and suggests practical ways that councils can truly make a difference to encouraging more cycling.

The history of strategy development in New Zealand

A number of councils have had cycling strategies in place since well before the turn of the century, e.g. Hamilton (1988), Lower Hutt (1991), and Palmerston North (1998). Indeed, the likes of Auckland and Christchurch have had strategy documents on cycling since the early 1980s. Now, virtually every major urban area either has a strategy completed or has one in preparation; the latest count is somewhere in the mid-twenties. A key motivating factor behind this recent rush has clearly been Transfund's new policy, which will only subsidise projects out of its Walking & Cycling output fund where they are identified in a regional or district walking/cycling strategy.

It is disappointing that, to date, councils with a more rural or smaller urban focus have largely avoided developing cycling strategies for their areas (with the likes of Taupo and now Tasman District being exceptions to the rule). Ironically, national census data shows that many of the smaller urban areas have the highest proportions of people cycling to work (e.g. Blenheim: 7.9%, Ashburton: 6.3%, Hawera: 6.3%). The local authority with the highest proportion of people cycling to work in the 2001 census was in fact Buller District Council (8.1%). These figures are probably also reflected in trips for other purposes, such as school and shopping. As well as denying adequate provision for cycling in their urban settlements, these councils are also ignoring the possibilities that promotion of cycle tourism and recreation can have on the wider district. While it is accepted that smaller councils have to make each ratepayer dollar go even further, there may be opportunities for neighbouring councils to band together for a joint strategy, or for regional councils to take up the baton (as has been done recently in Canterbury by Environment Canterbury).

Strategy types and content

Cycling strategies have generally developed down two distinct paths:

- **"Cycleway" strategies**; where the prime focus is the specification of a network of cycle routes for planning and implementation
- **"Four E's" strategies**; which encompasses how all of the tools of engineering, education, enforcement, and encouragement can be used to increase cycling.

Effectively the first type is a sub-set of the second and has partly grown out of the need for a network plan to qualify for Transfund funding (even though the funding is available for promotional projects too). In some cases too, unfortunately, it seems to have been developed like this because of a (mis)perception that "providing for cyclists" equates to "providing cycle facilities".

This paper is not primarily aimed at delving into the deficiencies within cycling strategies themselves. However, suffice to say that a strategy that only concerns itself with what cycle lanes and paths to construct is missing out on a number of cycle-specific tools in the arsenal. These include:

- Cycle training of both school children and adults

- Road safety promotion campaigns (e.g. sharing the road, cycle light use)
- Cycling promotion activities (e.g. Bike to Work Day, city fun rides)
- Marketing of cycling as an acceptable everyday activity
- Allowing cycle use in pedestrian areas (street malls, squares, etc)
- Provision of information about cycle routes (e.g. cycle maps, route signage)
- Police enforcement of poor motorist-vs-cyclist behaviour
- Regular auditing and maintenance of existing cycle facilities and routes
- Provision of high-quality cycle parking at key destinations
- Ongoing cycle counting programmes and public opinion surveys
- Allowing bikes to travel on public transport, and more "park'n'ride" facilities
- Lighting/security improvements to off-road routes, underpasses and parking areas
- Widespread council staff training in cycle planning and design
- Employment of a council cycling officer
- Setting up of a "cycling advisory group" to monitor strategy progress and debate policy

Even more important too than having the right strategy elements is having the means and funding to implement it. Already we have seen recent examples of new cycling strategies that have promptly had their recommended actions and works programmes deferred or considerably scaled down in funding. Even worse are those strategies that never actually costed what was required, let alone proposed an implementation programme.

Strategy Successes?

With those caveats in mind, we now turn our attention to whether a properly conceived and implemented cycling strategy can truly make a difference and get more people cycling. On the face of it, the signs don't look that great. If we consider the case of Christchurch for example, we have a council with (since at least 1996) a clear cycle network and implementation programme, one to three dedicated cycle planning staff at various times, ~$750,000+ per annum of dedicated cycle facility funding (and more developed as part of general roading works), and ~$200,000 per annum further in cycle education/promotion activities. Despite this, the latest census data and city-wide cycle counts suggest that cycle numbers have remained relatively static in the past five or so years, and certainly well short of the targets set.

One could argue that holding cycle numbers steady in an era of relative decline nationally is a triumph in itself (one could also argue that spending just 3% of their transport expenditure on the 8% of cyclists in Christchurch doesn't help either...). Still, if this is considered by many to be the "model" cycling city in New Zealand, how does that bode for other districts who are struggling to even come close to making the same relative commitment and investment?

Hierarchy of Cycling Treatments

To try to answer this, we need to consider first just what it is that cyclists usually want, in terms of providing for them in the transport network. The following "five-step hierarchy" of treatments[1] is commonly cited when trying to provide for cyclists:

(1) **Reduce traffic volumes**: Quite simply, cyclists would rather not have to tangle with motor vehicles. Local area traffic management schemes (particularly where cyclists can bypass the restrictions) and off-road shortcuts are some ways of achieving this.

(2) **Reduce traffic speeds**: If cyclists have to interact with motor vehicles, lower speeds reduce the speed differential and relative risk of severe injury (or at least the perceived risk). Some options here include 30-km/h speed zones, traffic calming measures, narrowing of very wide streets, and deflection at roundabouts.

(3) **Intersection treatment and traffic management**: Many of cyclists' biggest impediments are actually relatively small "pinch points", e.g. no waiting space at intersections, narrow bridges, one-way restrictions. It is this "death of a thousand cuts" that puts off cyclists.

(4) **Reallocation of carriageway/corridor space:** Road corridors often have more than enough room to cater for cyclists, particularly if under-used or over-sized traffic/parking lanes are removed or modified. A less preferable option is to borrow footpath space from pedestrians.

(5) **Specific cycle facilities:** If the above approaches are not able to produce a viable solution, then specific provision of cycle lanes and paths may be required.

The first thing that strikes you about this list is that traditional "cycle facility" solutions are at the very bottom, i.e. they should be the *last* thing to consider. The next thing to notice is that the treatments above this are generally barely discussed in district cycling strategies.

You have be a bit careful about interpreting this hierarchy. For example, some might say that an off-road cycle path helps to meet objectives (1) and (2) in the hierarchy by shifting cyclists away from traffic. This is no good however to many cyclists if the path in question is less direct than the on-road route they would prefer to take, or if it introduces new problems at intersections and road crossings (violating hierarchy objective 3) or with sharing the space with pedestrians and other non-motorised users (hierarchy objective 4).

In many respects, the hierarchy is intuitive in terms of why many people say they *don't* cycle. The stock reply is often *"cycling is too dangerous"*, but if this is teased out then more specific answers are likely to be *"I'm afraid of all that traffic"*, *"the traffic is much too fast"*, *"I hate the pinch point at xyz"*, or *"I keep getting squeezed by motorists"*. Not surprisingly, these responses are dealt with by the first four steps of the hierarchy. It is far less likely for people to not cycle solely because there are no cycle lanes or paths.

The hierarchy also reflects the fact that, even with a comprehensive network of cycle facilities, many cycle trip ends will be on the conventional street network, and much of the cycling is also likely to be away from specific cycle facilities. This is OK if your destination happens to be a quiet residential cul-de-sac; it may be more of a problem if you're heading for a major shopping centre on an arterial road. Therefore councils should always take heed of the credo from the famous Geelong Bike Plan of 1977 that ***"every street is a cycling street"***.

Building a Network: Patience is a Virtue

The less-than-stellar example given of Christchurch has led some local councillors in the city to recently call for a moratorium on cycle funding. As their general argument goes: we've spent millions on developing cycle facilities around the city, and have little to show for it in terms of increased cyclist numbers. Obviously these concerns have implications elsewhere now that many local districts are starting to develop their own cycle networks. If you don't get any apparent change in numbers, do you pull the plug?

The flaw in their thinking can be shown up when you consider cycle networks as a whole, and in particular complete routes from one place to another. Many experienced cyclists will tackle busy streets and intersections without batting an eyelid but, when it comes to novice cyclists, getting them to take the plunge on a bike (at least on a regular basis) may require a cycle-friendly route all the way. By "cycle-friendly" we are probably talking about routes containing quiet streets, off-road paths, streets with cycle lanes, and no difficult intersections. A desired route may be 90% sufficient in this regard, but the presence of one significant hazardous location may be enough to deter some cyclists from using it. Hence, the *completeness* of cycle routes is needed to get full take-up by cyclists; partial routes may not even get a partial increase in numbers.

Consider now the state of a network like Christchurch then. It sounds rather impressive to state that there are now over 60 km of streets with cycle lanes, and another 60 km of cycle paths. But then it has to be remembered that there are approximately 1500 km of urban roads in Christchurch. While many of them are low-volume "cycle-friendly" streets that don't need any special treatment, there still remain about 200 km of busy untreated arterial routes that many would-be cyclists will avoid. Also in many cases there are limited crossing opportunities to get across these busy routes from

one "safe haven" to another. The net effect is a series of "islands" somewhat isolated from each other or connected very intermittently by treated links. Now consider if the roading network was like that; what would be the impact on trips?

The upshot therefore is that growth in cyclist numbers solely due to cycle network development is most likely an exponential relationship (i.e. more growth towards the end) rather than a constant linear relationship. The fact that often the most difficult (and yet crucial) elements of cycle routes are left until last because of financial or political pressures only exacerbates this problem. The "easy" bits get done first, but generally it's not these bits that are limiting cyclist numbers.

Other Cycle-friendly Policies

But enough about the pitfalls inherent in cycling strategies. Such strategies do not exist in isolation from other council policies and actions. The success of the former is greatly influenced by what is done in the latter area. Such an approach also helps to emphasise the fact that the cycling strategy is not just an "add-on", but also an integral part of all of council's activities. Therefore, to really encourage more cycling, councils also need to seriously review and implement other "cycle-friendly" (and usually "sustainable transport-friendly" in general) policies.

So how then can councils try to encourage more cycling in their other policies?

- **Land Use and Development Planning:** This is not an overnight fix by any means, but people's travel mode choices are largely dictated by where they can choose to go. If there was a store in the next block for example, they're far less likely to need to travel five times as far in the car to the big shopping centre (and far more likely to consider using a bike).

  Some examples of good land use planning principles include
  - Mixed-use zoning (avoiding the need to travel to another area for various needs)
  - Minimum cycle parking requirements for new developments (encouraging the use of cycling to a wide range of destinations)
  - Capped car parking requirements (encouraging alternative modes by restricting the availability/ease of car parking)
  - Medium-high density developments (improving the viability of non-car modes)
  - Constrained urban areas (limiting the growth in long-distance urban trips)
  - Provision by developers in and linking to new subdivisions (e.g. new pathways)
  - Cycle provision in new/upgraded commercial developments (e.g. intersection/road improvements for cyclists)

  Councils should review their District Plans for cycle-friendly policies.

- **Speed Limits:** The IHT hierarchy identified motor vehicle speed as being a key factor in people's acceptance of cycling as an option. Where motor vehicle speeds are only ~30 km/h for example, cyclists can very safely co-exist without any special facilities. And yet, to date, there are virtually no areas in New Zealand with speed limits below 50 km/h (the imminent introduction of the LTSA *Setting Speed Limits Rule* now makes them easier administratively to implement). Overseas the benefits of 30 km/h (or 20 mph) residential zones have been conclusively shown, particularly in regard to road user safety and community amenity. A UK study of 20 mph zones[2] found that the average accident frequency fell by about 60% after schemes were installed, over all road users. For cyclists, the reduction was 29%, with child cyclist accidents falling by 48%.

  While largely residential areas are primary candidates for lower speed limits, an arterial or collector road could also successfully have a speed limit below 50 km/h, particularly if these streets are also major residential, shopping or business streets. It is precisely these types of streets where lower speed limits are needed, as high traffic volumes are combined with high pedestrian and cyclist numbers. Australian studies[3] support this and again the practice is common in Europe.

Higher speed routes also should be assessed for their appropriateness. The presence of a large number of cyclists, e.g. near a school, may warrant a lower speed limit in that area (or at least a part-time speed limit, as has been successfully trialled in Christchurch). If necessary, some engineering measures such as thresholds and narrow traffic lanes may be necessary to achieve the desired vehicle speeds.

Councils should review their existing speed limits and develop policies for implementing low-speed zones.

- **General Road Construction and Maintenance:** For a long time to come, most of the transport funding will still be going towards "general" roading projects and, as discussed earlier, cyclists can be expected to be using most of these routes. Therefore it is imperative that these roading "improvements" do not actually make things worse for cyclists (the construction of multi-lane roundabouts being a classic case in point). Ways to achieve this include cycle design training for all roading design staff, and vetting of all projects by a dedicated cycling officer.

  Better yet, the opportunity should be taken to incorporate improved cyclist provision at the same time, to achieve economies of scale. Kerb reconstruction works for example, allow the prospect of providing a new road carriageway with adequate space for all road users. Similarly, resealing works can be used to re-mark the road in a more cycle-friendly manner. Other opportunities to look out for include:
  - Consideration of cyclists in safety improvement works or intersection changes
  - Cycle links within Local Area Traffic Management schemes (e.g. contra-flow lanes)
  - Cycle-friendly detectors and signals/phases with traffic signal upgrades
  - Coordination with projects being carried out by adjacent TLAs or Transit NZ
  - Inclusion in arterial traffic management (e.g. parking restrictions, crossing facilities)
  - Inclusion with bus priority schemes (e.g. bus/bike lanes, "head start" signals)
  - Inclusion with urban renewal projects (e.g. town centre enhancements)
  - Provision for cyclists in bridge replacements/widenings
  - Opportunities for wider shared pathways during footpath reconstructions
  - Combining with pedestrian improvement funding (e.g. barrier removal, crossings)
  - Shoulder widening as part of edge break repairs.
  - Cycle facilities in conjunction with other developments (e.g. rail corridor, pipelines)

  Maintenance activities also need to recognise the difficulties often faced by cyclists, who are far less able to just ride over debris or surface problems. Often road sweeping just succeeds in shifting the material onto the shoulders where cyclists are. Particularly vigorous monitoring is required immediately after storms (including clearing off-road paths) and during/after construction works adjacent to the road. Temporary traffic management (e.g. during roadworks) also needs to seriously start taking into account the needs of cyclists, such as providing alternative cycle lanes when the existing one is blocked. Along off-road paths, pro-active vegetation maintenance is also needed to provide a high standard of facility.

  Councils should ensure that all roading projects are reviewed for alignment with the cycling strategy and that maintenance contracts provide for cyclist-specific services.

- **Parks & Reserves Planning:** Providing for cycling can often focus on the traditional transport network. Like pedestrians however, cyclists have the advantage of being able to make use of other corridors without detriment to the surrounding neighbourhood. Many of these areas come under control of a "parks & reserves" unit, so it is imperative that they fully appreciate the implications of their planning processes. Path design and access control for example may be of significance to potential cycle users.

  Part of the role of parks & reserves units is often to identify areas for the purchase and development of new reserves. This is where key "missing links" in potential cycle routes can often be provided, providing a short-cut that motorists can't use. Certain potential routes can also add to the attractiveness of cycling, e.g. along riverfront and waterfront corridors.

Councils should ensure that all reserve development projects are reviewed for alignment with the cycling strategy and strategic property purchases are identified where feasible.

- **Travel Demand/Behaviour Programmes:** Travel mode change is probably more an issue of behaviour rather than availability of adequate facilities. While there continues to be much concern about supposedly inadequate roading corridors and the need to provide more capacity ("supply-side management"), what is often neglected is the alternative solution of reducing travel demand to meet existing capacity ("demand-side management"). More people cycling for example is one way to reduce the strain on our congested traffic routes, so the trick is to encourage people to do this.

  Many existing cyclists would argue that the existing road network is reasonably adequate to cycle on as is; and that people just need to "try it out". Making that first tentative step however to taking up (or re-taking up) cycling can be a difficult one without the right incentives or support networks. It is often hard as experienced cyclists and advocates to appreciate how challenging it is for people to take that first bike ride. What will the traffic be like? What's the best way to go? How much of a physical effort will this be? How long will it take? Can I remember how to ride properly?

  Targeted marketing programmes, like "TravelSmart" from Australia, have already found significant success at a suburban scale here and overseas. TravelSmart works by targeting those who choose to travel by car, but may have other options. Households are contacted and asked how they currently travel and whether they would like information about alternative options. Those who are not interested in further information are left alone, allowing concentration on those who are. Those already using walking, cycling and public transport are rewarded with small gifts to encourage them more. The remaining group are provided with whatever information they request on these modes, such as timetables, cycle/walking maps, trial tickets, general information guides, etc. If necessary, people can even request home visits by someone to discuss any issues or concerns further (e.g. checking out the state of their old bike, providing a "buddy system"). People are encouraged to at least consider changing just two or three of their car trips per week - an achievable objective that empowers people, as it doesn't require giving up the car or changing lifestyles.

  The first major TravelSmart trial in South Perth covering 15,000 households saw a *91% increase* in cycling trips, even one year after the programme[4]. This figure includes the 40% of initial respondents who were not interested and subsequently left alone. More recently, Environment Canterbury has trialled a similar "Go Smarter" project in a Christchurch suburb, the results of which are being presented elsewhere at this conference, and a similar "TravelWise" programme has been developed in North Shore. Full-scale behavioural marketing programmes are not cheap but, compared with large roading projects, they are exceptionally cost-effective.

  Councils should implement travel behaviour programmes in their areas.

- **Employer/Institution Travel Plans:** One only has to look at some of the large attractor destinations like hospitals, universities, shopping centres, and so on to see a huge potential in travel choices that could be changed. In many respects it is easier and more cost-effective for encouraging cycling to concentrate on a focused group in the same place, rather than broader district-wide campaigns. Typical tools used on sites include
  - Adequate secure, covered cycle parking provision
  - Changing/shower/locker facilities
  - Local support networks (Bicycle User Groups or "BUGs")
  - Car parking charges and/or parking space restrictions
  - "Work-pool" cycles, and cycling mileage allowances
  - Company car "cash-out" arrangements

Once employers and institutions appreciate the financial benefits of a greater on-site cycling population (e.g. lower parking/vehicle costs and space, reduced sick leave), they can reap the rewards.

Perhaps even more crucial and effective than ordinary business travel plans are travel plans for schools. Rather conveniently, discussions on travel choices can be incorporated into the teaching curriculum to raise awareness of the broader issues and introduce good practices. Cycle training and "Safe Routes To School" projects can be introduced, perhaps even "cycling school buses". Even seemingly unrelated issues such as the ability for girls to wear trousers rather than skirts can greatly affect the likelihood of pupils taking up cycling. Not only do you effect change in the travel patterns of schoolchildren, with luck you set them up for a habit for life. And hopefully some of the effect will also rub off on their parents and teachers!

Councils should assist local employers and institutions to develop their own travel plans, and provide resources for school cycling programmes.

- **Public Health and Recreation Programmes:** Another example where non-transport agencies can play a big part in encouraging cycling. Health and sport/recreation agencies recognise the intrinsic personal and social benefits of encouraging modes such as walking and cycling. Therefore it is vital that their resources are aligned with other local initiatives to get the best "bang for bucks". Doctors can be encouraged to recommend "green prescriptions" of activity like cycling. Recreational rides and cycle riding/maintenance courses can be provided to gently introduce people to cycling and provide them with basic skills.

  Councils should liaise with relevant health and sport/recreation agencies to identify synergies with their cycling strategy.

- **Traffic Calming and Local Area Traffic Management:** Again, this is an area that has been woefully under-used in New Zealand to date. Various techniques are available to slow down, restrict, or completely remove motor traffic in certain neighbourhood areas, including narrowings, traffic islands, platforms, one-way streets/entrances, and road closures. Similarly, treatments are available to allow cyclists to avoid these restrictions, such as pinch-point bypasses, contra-flow lanes, and short off-road links. In this way cyclists get an advantage over motorists for many local trips, and also benefit by the reduced presence of motor vehicles.

  If we apply the classical "rooms and corridors" approach to transport planning, it suggests that inside all of the areas bounded by arterial routes the aim should be to minimise traffic use and enhance liveability. Applying this on an area-wide basis (i.e. a whole neighbourhood) is far more effective and logical than piecemeal development on a street-by-street basis that appears predominant in New Zealand.

  Traffic management is also a particularly powerful tool for encouraging people back into the town centre. Many cyclists are put off travelling to central urban areas because of the amount of traffic. Providing traffic-calmed areas and traffic-free areas for pedestrians and cyclists can produce attractive environments that encourage more people back into town (and keep businesses very happy).

  Councils should develop policies for implementing traffic management schemes and provide adequate funding for large-scale programmes.

- **Limited Roading Capacity Improvements:** Although it never seems to be spelt out in cycling strategies, if a key aim is to increase the proportion of people cycling, then an implicit corollary is a *reduction* in the proportion of people travelling by other modes, and in particular the car. Yet, the development of most cycling strategies and networks is still going on hand-in hand with the continued development of the roading network. Trying to provide for more motor vehicles *and* providing for alternative modes at the same is not likely to result in a significant change in past travel behaviour. Why would you switch to using the brand new cycleway if your council has also just "upgraded" your existing motorway?

The ultimate example of road capacity restrictions is the *removal* of existing traffic lanes, often to provide better space for other modes. Contrary to popular opinion, this isn't likely to cause the end of the world! Indeed, in the same way that the phenomenon of "induced traffic" has been demonstrated when additional roading is provided[5], studies of capacity reductions have found that some previous traffic just disappears from the transport network[6], again providing a more cycle-friendly environment. Locally, there are examples in Dunedin and Nelson of four-lane roads that have been converted back to two-lane roads.

Councils should consider in detail all alternatives to providing additional roads and capacity before implementing such projects.

- **Parking Management:** A common problem when trying to implement cycling strategies is the conflict raised when parking needs to be remove to make space for cycle lanes (indeed, it is a common problem for traffic management projects of all kinds). Without a common set of guidelines on how to address this, the same issues can end up being rehashed as each new project is debated in council.

  Development of a district-wide parking strategy is a useful way of capturing the desired outcomes of both council and the community. Priorities for kerb space can be developed for different situations; for example parking may be less desirable on an arterial route compared with a commercial district. A move to shift more on-street parking to off-street locations can help to provide more corridor space for all road users. And it should not be forgotten that the use of parking charges and limited car parking numbers can also make people think twice about taking the car. Christchurch City recently developed a city parking strategy that provides a useful model for other places (it remains to be seen now whether the city will abide by the strategy's guidelines).

  Councils should develop and apply district Parking Strategies.

- **Road/Congestion Pricing:** For those places where traffic really has reached epidemic proportions, the prospect of driver charging and toll regimes is now becoming more likely. This has two key desired effects. Firstly, where it is targeted on particular routes or time periods, it can provide some "smoothing" of flows to minimise peak over-congestion. Secondly (and more importantly for encouraging cycling), it can better reflect the true costs of motoring and make people consider switching to cheaper alternatives like cycling.

  Councils should consider options available in their area for tolling and road charging schemes.

- **Leading by Example:** It's a bit rich for council officers and politicians to be encouraging people to get cycling if they are continuing to drive their own gas-guzzlers into work every day. Therefore local/regional government organisations need to look at their own affairs and consider how cycle-friendly they are. Are there secure cycle parking and changing facilities at all public sites? Are there "work-pool" bicycles available for business travel around town? Do staff cyclists get mileage allowances similar to their driving/bussing counterparts? Is there an internal cyclist support network and regular promotional activities? Perhaps more importantly, do senior management lead by example?

  Councils should review their internal transport policies and seek "buy-in" from senior management for cycle-friendly programmes.

Conclusion

The above discussions have in some ways only scratched the surface on the options available to encourage cycling right across (and beyond) councils. Those who are interested in more details in this area from a New Zealand perspective might like review Roger Boulter's landmark *"Into the Mainstream"* report[7] and the recent comprehensive LTSA literature review on cycle network

planning[8]. Overseas, the Danish compendium on "Cycling Concepts" provides a brilliant coverage of many options tried in that country[9].

It is acknowledged that some of the suggestions are not easy to implement, both in terms of political/public acceptance and funding availability. This doesn't make them any less desirable or indeed necessary to truly achieve an increase in people cycling. The challenge remains therefore of local advocates, professionals and politicians to educate all parties of the long-term benefits of such policies, so that they can be implemented. In that way, we might actually get MORE PEOPLE CYCLING.

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