IT'S NOT ABOUT THE BIKE LANE

(with apologies to Lance Armstrong...)

Many local cycling strategies appear to focus on the specification of a network of cycle routes for planning and implementation. In some cases, this seems to have been developed like this because of a (mis)perception that "providing for cyclists" equates to "providing cycle facilities".

Leaving aside the fact that there are many non-infrastructure activities that are just as important as the physical stuff (i.e. the three "E"s of Education, Enforcement, and Encouragement), a philosophy that concentrates on specific cycle routes and facilities probably won't satisfy the Engineering component of providing for cyclists either.

UK's Institution of Highways and Transportation (IHT 1996) proposed a "five-step hierarchy" of physical measures for cyclists. In order of priority they are:

1. **Reduce traffic volumes**: Quite simply, cyclists would rather not have to tangle with motor vehicles. Local area traffic management schemes that divert or restrict traffic (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 or approach routes at intersections, narrow bridges, one-way restrictions, and the good old drainage grate. It is this "death of a thousand cuts" that puts off many would-be 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. Shared facilities like bus/bike lanes are another alternative. A less preferable option is to borrow footpath space from pedestrians.
5. **Separate cycle facilities:** If the above approaches are not able to produce a viable solution, then specific provision of separate cycle lanes and off-road 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 often barely discussed in local cycling strategies. Interestingly they also tend to benefit other road users better as well.

No cycle facilities needed on this street

The idea is that you work your way down the hierarchy, asking *"can I do anything at this step that would help cyclists?"* Now it's not expected that you can always apply the items at the top. Along a major arterial, for example, it is pretty difficult to reduce traffic volumes; however you might be able to reduce high traffic speeds, and you can probably deal with intersection pinch-points and other traffic management issues. The key is to at least *think* about the possibilities.

You have to 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"*. As you can see, 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"*.

Using the hierarchy allows you to concentrate more on area-wide treatments (e.g. traffic calming a whole neighbourhood, or treating a whole lot of intersections first). As explained very well by Patterson *et al* (2003), this avoids the problem whereby only certain “routes” are improved for cyclists, while other streets don’t receive any consideration and often become worse over time for cyclists.

Useful References

- Bicycle Victoria, 2004. *Better local traffic controls for safer cycling & walking.* Web: ***http://www.bv.com.au*** (search for “LATM”)
- IHT, 1996. *Cycle-friendly Infrastructure: Guidelines for Planning and Design*. Institution for Highways and Transportation, Cyclists’ Touring Club, Bicycle Association, & Department of Transport, London, UK.
- F. Patterson, *et al*, 2003. *From the city to the outback – next generation bicycle planning in South Australia*. Proceedings, NZ Cycling Conference 2003, North Shore, pp.109-124.

Glen Koorey (koorey@paradise.net.nz, ph.03-3317504)