8. CYCLE FACILITIES FOR ARMAGH STREET

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Corporate Plan Output: 9.5.text.57	

The purpose of this report is to recommend a course of action for progressing the cycle facilities project for Armagh Street.

STATUS OF PROJECT SO FAR

- **6 Sep 00:** At its September meeting, the Hagley/Ferrymead Community Board decided not to support the proposal for cycle lanes on Armagh Street (Rolleston to Fitzgerald) as recommended by the City Streets Unit.
- 12 Sep 00: The City Services Committee, at its September meeting, did accept the project as proposed.
- **21 Sep 00:** At the Board's seminar meeting, the Board reiterated that it preferred to see off-carriageway cycle facilities instead of cycle lanes, and was prepared to support the extensive traffic calming and parking reduction necessary to make that happen.
- **28 Sep 00:** Full council registered the debate between the Community Board and the City Services Committee, and recommended a meeting between the two to resolve the issue.
- **2 Nov 00:** Hagley/Ferrymead Community Board rejected a further report on Armagh Street, and sought to ensure a meeting between the Community Board and City Services Committee.
- **7 Nov 00:** City Services Committee arranged to meet Hagley/Ferrymead Community Board at the Board's next meeting on 27 November.

The following paragraphs briefly discuss some of the issues relevant to cycle lanes or cycle pathways.

ISSUES INVOLVED IN DEVELOPING CYCLE LANES

Scheme plans have been drawn for cycle lanes on Armagh Street. The plans involve lane treatments at <u>all</u> signalised intersection approaches, and mid-block cycle lane markings between Montreal and Madras Streets. No mid-block cycle lane markings are proposed from Rolleston to Montreal or from Madras to Fitzgerald because both the traffic volumes on these sections are much lower than the inner-metropolitan sections, and the road is narrower, at 12m k-k, than the inner-metropolitan sections.

The cycle lane plan only requires the removal of 3 on-street parking spaces where there are currently "squeeze" points. All property owners outside the parking removal areas have been individually contacted. One is unhappy with the parking removal, but an option exists to restore a parking space.

The cycle lanes proposed will fit around the tram tracks, and some signal control changes at Armagh/Colombo will provide particular assistance to cyclists. Full cost is approximately \$40,000 (old paint removal, new paint, and coloured surfacing at intersections).

Advantages of Cycle Lanes

The primary advantage of implementing the cycle lane plan as it stands is that it will be quick, easy to do, and will have a very high visual profile for few detrimental impacts on the road. Cycle attitude research over the last couple of years shows very clearly that the highest profile cycle promotion tool available is the cycle symbol painted on the roadway - cycles are brought to the presence of drivers while they are driving.

It has also been shown, through Christchurch studies, that cycle lanes offer reductions in cycle/vehicle collisions, **and also** offer reductions in vehicle/vehicle collisions, and pedestrian/vehicle collisions.

Finally, we are also aware, primarily from overseas research, that cycle lanes make a road more attractive to cyclists than roads without.

Disadvantages of Cycle Lanes

By their positioning outside of parked cars, the primary disadvantage of cycle lanes is that cyclists are still vulnerable to car-doors opening suddenly. Cyclists are also vulnerable to moving vehicles (as of course the separation between them is visual/perceptual, rather than physical).

When wishing to do movements other than those directly catered for by cycle lanes, cyclists are required to mix with traffic movements as they would without cycle lanes.

ISSUES IN DEVELOPING SEPARATED CYCLE PATHWAYS

Technically it is possible and practical to create an off-carriageway, or separated pathway along Armagh Street. It would need to be about 2.5m wide, if not a little more, to cater for two-directional flow. The most appropriate positioning for a pathway of this nature would be on the southern side (not tram-track side) of Armagh Street. It would require the removal of all car-parking on the south side (if the path was to be on the other side the path confines would create problems with the tram tracks - cyclists would have no room to cross tracks at comfortable angles).

Advantages of Separated Paths

Separated paths have the advantage of creating physical separation between moving vehicles and cyclists, ideally increasing both the perceptions of safety of road users, and the actual safety. It must be stressed, however, that physical safety improvements are **critically dependent** on the management of cycle, vehicle and pedestrian movement patterns at intersections. Intersection safety would be optimised by separate cycle-phases at signalised intersections.

The decrease in perceptual risk may make the route more attractive to cyclists of varying confidence and competence, so it is possible that cycle volumes will increase, however actual safety improvements would be debatable.

Disadvantages of Separated Paths

The disadvantages of a separated, off-carriageway path on Armagh Street relate to cost, impact on other traffic management issues, and the impact local businesses:

- The simplest form of path construction, a physical separator from moving traffic, plus intersection changes, and signal changes, would cost in the region of \$160,000. Full development of a cycle pathway at footpath height would cost approximately \$350,000.
- The pathway would require the removal of approximately 35 metered car parks at a revenue loss to the Council of approximately \$42,000 per year. In addition there would be an equivalent on-street (non-metered) car-parking loss.
- The special cycle phases at the traffic signals would need to be developed so that there is no impact on the one-way street system co-ordination. This would ensure very short vehicle signal times on Armagh Street making it practically non-functioning as a vehicle through route (includes impact on buses and the tram).
- Local Armagh Street businesses are likely to be reluctant to accept on-street parking removal without significant discussions, persuasion and participation in assessing the merits of the project. The immediate impacts on the businesses will be hard to assess, as no-body knows what percentage of retail turnover comes from people parking outside the business door.

In summary, the types of cycle facilities developed need to be suited to the road and streetscape environment in which they are placed. It is a common perception that pathways are safer, but this is NOT the case where the paths may be occupied by crossing pedestrians, or may be subject to poor intersection management (as would be forced under current law), or where cyclists may wish to exit and enter the path at a multitude of points. The City Streets recommendation is that cycle lanes are the most appropriate treatment for Armagh Street.

A RECOMMENDED WAY THROUGH THE PROS AND CONS

The off-carriageway, two-way cycle path is, perceptually, the most attractive cycle route option from an inexperienced cyclist's perspective, and is seen to contribute to the goals of encouraging cycling, reducing private vehicle loading in the central city and creating a more liveable street. The "but" in the process comes from determining a realistic implementation design and timeframe.

The necessary design work for a cycle pathway on Armagh Street would have significant impact on the operation of all intersections it crosses, and these impacts would need to be evaluated on a central-citywide basis.

For such a major change to a street character and function, and major change to overall traffic control in the central city, it would seem unlikely that the Council would support imposing this style of facility on the users and occupants of Armagh Street immediately. Implementation will require a long consultative process for which the Council is most likely to seek a reasonable level of support from businesses and users. A process of over two years would not be unrealistic, considering the range of issues likely to be involved.

In addition to this, the Central City Revitalisation consultation project is already underway. To load a further central city consultation process of the magnitude of Armagh Street into the existing process will affect both projects. The most likely result from this is that the Armagh Street cycle path project would be held in abeyance until the Central City revitalisation process is worked through to the point where it may be considered to "fit in" with the project's outcome.

Given the likely extensive delay to creating an off-carriageway cycle path on Armagh Street, it is recommended that both the Community Board and the Cycle team within city streets include it as one of element of their submissions to the Central City process.

In the meantime, given the known safety benefits, and the known promotional benefits, it is further recommended that the cycle lane project proceed as proposed.

The result of accepting these recommendations will be a staged cycle facility introduction process:

- First come cycle lanes with minimum traffic management impact, minimal parking impact, but a good safety enhancement impact and excellent visual/promotional value.
- With a raised, on-street profile, cycle planning and the Community Board advocate for stronger cycling measures on Armagh Street.
- The Central City Project team consider the Armagh Street cycle path as part of the overall projected transport plan for the central city, and cover some of the higher level consultation on the issue. Note that other car-free cycle routes will also be submitted to the Central City Project process.
- If and when the central city is ready for the expenditure, and the parking and transport impacts, the Armagh Street cycle path should be implemented.

The result of rejecting the cycle lane proposal and seeking only to develop the Armagh Street cycle pathway is that no cycle improvement works would occur on Armagh Street for the immediate future. From the cycle route planning perspective, we would not like to lose the possibility of such a cheap, but high profile set of works.

COMMUNITY BOARD CONSULTATION

As resolved by the Council a joint meeting of the Hagley/Ferrymead Community Board and the City Services Committee was held on Monday 27 November 2000 to discuss cycle facilities for Armagh Street. Following this discussion, the Hagley/Ferrymead Community Board confirmed its support for the proposal as detailed in the report.

Recommendation: That the Council approve the Armagh Street cycle lane project.