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BY EMAIL

Members of the City Deal Assembly

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The Chisholm Trail:

Some background notes for members of the City Deal Assembly

The 'Chisholm Trail' is Cambridge Cycling Campaign's proposal for a premier route running north to south, following much of the railway line. The route was proposed by long-standing member Jim Chisholm in 1998, and became part of the Cambridge Local Plan in 2007.

Jim did not propose the name, but his passion for the route in 1998 led to the name...

The Officer and Project reports make clear how and why such a route should be constructed, although needing the co-operation of Network Rail and other landowners. Cambridge Cycling Campaign is very pleased with the progress.

We are especially pleased to see proposals for a route that skirts Ditton Meadows hence reducing the impact there. The proposal for an underpass beneath Newmarket Road would enable a route from Milton Road to Addenbrooke's that has only one busy road crossing and is mainly 'traffic-free'. The officer report says: "Added benefits of the project are... the opening up and linking of green spaces, and the possible creation of pocket parks giving scope for public art and other initiatives and projects". We applaud this, as the route must be more than just a 'utility route', but an attraction in itself.

The rest of this briefing outlines some of the economic benefits both obvious and less obvious.

This route will be good for residents of Cambridge, good for residents of South Cambridgeshire, good for visitors, and good for all businesses in the area and their staff.

The economic justification for such a route is simple:

- It enables many more trips by cycle, into and around Cambridge to be undertaken by those not confident to ride on roads with busy motor traffic.
- Many such trips will have formerly been made by car.
- Even that small reduction in traffic reduces congestion and improves reliability for those in motor vehicles, such as buses and delivery vehicles.
- It helps with expansion in and around Cambridge without the need for very expensive and damaging highway expansion.
- Cycle trips will be refreshing rather than stressing.

Trips from Milton to Addenbrooke's, or Trumpington to the Science Park, will be easily accomplished by those of all abilities. This will enable many families to relinquish a second car, and allow many more teenagers to travel independently for school, or social visits.

The increasing numbers using cargo bikes, tricycles or electric-assisted machines would find many sections of this route of great benefit.

The less obvious decongestant effect of such a route can be explained in two ways:

Firstly, many people assume that the drop in traffic over a half-term week is of the order of 50%. They perceive the change in delay, but that is not linearly related to flow. Were a reduction in flow of 50% needed to remove congestion it can be seen as unachievable without draconian measures.

It is not so, with the actual peak hour's change in motor vehicle flow, measured by automatic traffic counters on Milton and Huntingdon Roads, being around 10%. A mode switch of that order is easily achieved with better cycle and bus routes.

Secondly most radial routes into Cambridge have queues approaching one mile. Such a length of queue will contain little over one hundred vehicles.

If the maximum number in that queue were removed from the peak hour's flow no queue would ever exist and delays would be very much reduced.

A typical theoretical 'flow-delay' curve would suggest that few delays will occur until flows reach 80% of capacity for a road, with delays rising rapidly thereafter. Clearly you cannot ever exceed 100% capacity.

Hence getting those who currently make short peak-time car trips to switch to another mode such as cycling can achieve large reductions in congestion delays. This means that it is likely that non-user benefits (i.e. for those who remain in vehicles) will exceed user benefits (i.e. those who already cycle or who switch to cycling).

Mainly due to improved routes, cycling in from the necklace villages has nearly doubled in ten years. That has helped many living south of the city to access Addenbrooke's by cycle, and those North to similarly access the Science Park, often without any need to cycle on a busy road.

Within Cambridge any cross-city cycle trip will normally either be convoluted or use busy roads. The Chisholm Trail would change that for a huge number of journeys, hence enabling many who would like to cycle, but who currently lack the confidence to cycle on busy roads, to leave the car at home. It should also give more parents the confidence to allow teenage children to travel independently.

Unlike for many DfT schemes, it is apparently not permitted to include the huge health benefits of active travel as part of the economic assessment. This is disappointing.

Good further background reading is:

"Making politicians invest in bicycle infrastructure" by the Cycling Embassy of Denmark:

www.cycling-embassy.dk/2015/06/30/making-politicians-invest-in-bicycle-infrastructure

"Urban Transport without the Hot Air" by Steve Melia which uses Cambridge as a case study:

www.stevemelia.co.uk/urbantransport.html