

3. KERB AND CHANNEL RENEWAL PRIORITISATION

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The purpose of this report is to develop a policy framework for prioritising kerb and channel renewals for Council approval in line with the Council resolution in July 2002.

JULY 2002 COUNCIL RESOLUTION

- 1. That the budget provision for kerb and channel renewal programme be increased by \$2m per annum from 2005/06 for ten years.*
- 2. That, following consultation with the Community Boards, the Sustainable Transport and Utilities Committee develop a policy framework for prioritising kerb and channel renewals for the Council's approval.*
- 3. That Community Boards be provided with the kerb and channel renewal programme to enable them to prioritise this work.*
- 4. That the City Streets Manager be authorised to fund a component of the Living Streets programme from the City Street kerb and channel renewal output.*
- 5. That, in future, the cost of roading projects be included in the 'start work' notices to residents.'*

This report deals with resolution two, with resolution three being part of the policy.

KEY OBJECTIVES

The key objectives of the kerb and channel renewal programme are to:

- Meet Asset Management Plan requirements,
- Minimise lifecycle costs,
- Make a positive contribution to achieving a sustainable Christchurch,
- Maximise environmental benefits,
- Enhance quality of life,
- Maximise Transfund revenue.

BACKGROUND

The City Streets Asset Management Plan requires that a specific length of kerb and dished channel is replaced each year. Currently this is 20km. The annual cost is about \$10m per year.

The purpose of kerbs and channels is primarily to provide a means for stormwater runoff to reach an outfall point, and secondly to delineate a road edge for road users and to provide 'protection' for pedestrians directly adjacent to the carriageway. The condition of the kerbs and channels has safety implications for pedestrians, as well as safety implications for all road users should the channel not prove to be operating adequately during storm conditions. Inadequate drainage is also one of the major factors causing damage to the structure of the carriageway.

The current process for developing the kerb and channel renewal programme involves prioritising streets according to the overall condition and functionality of the kerbs and channels, the extent of adjacent carriageway failure, road hierarchy/traffic volumes, existing road shoulder cross-falls, existing street tree issues, specific traffic issues, the needs of cyclists, pedestrians, and bus users, undergrounding issues, and the potential maintenance cost savings at the site.

The current process results in a weighting towards arterial and collector roads as these provide the greatest benefits.

Transfund provides financial assistance of approximately \$2.5m per annum for the kerb and channel renewal programme. This is justified on the basis that drainage control is an essential element in the maintenance of the road carriageway. If channels are in poor condition they let water into the road pavement and accelerate deterioration and increase maintenance costs. The higher the traffic volumes the more rapid the deterioration.

It is necessary, therefore, to ensure that those channels that are in the worst condition are replaced first to ensure the Council continues to receive Transfund revenue.

DISCUSSION

The kerb and channel renewal programme provides an opportunity for a complete street renewal and enhancement and in virtually all cases footpaths are renewed, traffic improvements are made, and landscaping is installed.

The prime reason for replacing kerb and channel is to replace an aging asset, and this can be for condition, safety and obsolescence reasons. Prudent asset management requires renewal and replacement of assets to minimise life cycle costs. Replacing too early means spending money when it shouldn't be spent and a 'loss of life' cost is incurred, ie the residual value is wasted. Replacing too late means unnecessary extra maintenance, safety and community costs are incurred. Because kerb and channel deteriorates gradually over a number of years there is usually some flexibility of a few years when renewal can be undertaken.

Because of the need to manage assets in a prudent manner, condition must be the prime criteria in any assessment and because of the effect on the road pavement the carriageway condition and traffic volumes are also main factors.

Safety and amenity issues together with the 'social' factors around the old style dished channels are also important and need to be considered.

Other factors considered are coordinating kerb and channel renewal programmes with other development plans and programmes, benefits of clustering for urban renewal and community benefits and combining with adjacent streets to save costs. Currently this is done as the second stage in the process, ie the streets are 'technically' assessed and ranked, then the programme is adjusted to take into account these other issues.

COMMUNITY BOARD CONSULTATION

In October 2002 the City Streets Unit consulted with Community Boards. This consisted of presenting background information and obtaining feedback from each Board.

The feedback can be summarised as follows:

- There was general acceptance of current criteria,
- Process needs to be transparent and applied consistently,
- Assessment criteria should be understandable to a 'layperson',
- There were mixed views on Community Boards being 'allowed' to substitute projects within their area,
- Increase 'K&C Condition' factor to 50%,
- Breakdown the 'K&C Condition' factor into sub headings,
- Safety issues should be more specifically covered,
- Schools, commercial developments, 'special needs' facilities and areas to be factored in,
- Take into account the redevelopment in the street,
- Recognise community needs,
- Changes in traffic patterns due to other works,
- Take into account 'Tourist' and public areas.

SUSTAINABLE TRANSPORT AND UTILITIES COMMITTEE FEEDBACK

A seminar was held with the Sustainable Transport and Utilities Committee on 19 February 2003.

Key points raised:

- Output name should be changed to Street Renewal,
- As part of the prioritisation policy the type of replacement, eg swales, and integration with living streets objectives should be included,
- "Clustering" issues – "clustering" for technical/economic reasons and "clustering" for community reasons - eg Urban Renewal, Charleston type projects, etc should be included in policy,
- Robust policy and clear delegation to Sustainable Transport and Utilities Committee to make decisions needed.

PROPOSED RATING SYSTEM

The present prioritisation system, approved in May 1998, has the following weightings. A rating of 0-10 is applied to each factor and is multiplied by the weighting to give an overall score:

Kerb and channel condition/functionality	40%
Carriageway condition	10%
Traffic hierarchy/volumes	10%
Existing shoulder crossfalls	5%
Maintenance cost savings - cleaning, street tree issues etc	5%
Proximity to schools	5%
Proximity to businesses	5%
Traffic related issues - vehicle, cycle, pedestrian and bus user issues	15%
Undergrounding issues	5%

The proposed prioritisation system, taking into account Community Board feedback and as modified by the Sustainable Transport and Utilities Committee, is as follows:

Kerb and channel condition/functionality	45%
Carriageway condition	10%
Traffic hierarchy/volumes	10%
Existing shoulder crossfalls	5%
Maintenance cost savings - cleaning, street tree issues etc	5%
Proximity to schools, 'special needs' facilities, businesses, leisure facilities, etc	10%
User related issues (including safety) - pedestrian, cyclist, motor-cyclist, car, passenger bus, tourist bus and heavy commercial vehicle)	15%

Key changes are:

- Combining proximity to schools and proximity to businesses and expanding the definition to cover other facilities,
- Changing traffic related issues to user related issues,
- Removing undergrounding issues in the rating, but considering any undergrounding issues in the second phase.

PROPOSED PROCESS

The proposed overall process is:

- Step 1 - Initial ranking of streets from RAMM report based on channel condition, and age.
- Step 2 - Detailed rating of individual streets using weightings in the table above.
- Step 3 - Ranking adjustments taking into account other factors referred to in the discussion section above.
- Step 4 - Community Board consideration of ranking and opportunity to make adjustments in their area (within a defined period only).
- Step 5 - Sustainable Transport and Utilities Committee review and approval of programme and allocation of funding provided for Living Streets.

IMPLEMENTATION AND TIMING ISSUES

In order to have sufficient lead time for the consultation and planning of projects so that the actual work can be undertaken in the year it is programmed, it is necessary to have some certainty around the new year one and the majority of year two of the programme. This also provides certainty for the residents in those streets. This means it is undesirable to have changes to the first year of the new programme, and limited changes to the second year. It is accepted that some changes will be required for technical reasons and as a result of issues raised during the consultation phase in those first two years.

It is, therefore, desirable that Community Boards and the Sustainable Transport and Utilities Committee, in implementing this changed prioritisation process, focus on the new years two to five of the programme for changes due to community issues.

LONG TERM COUNCIL COMMUNITY PLANS

The Local Government Act requires the Council to prepare a Long Term Council Community Plan (LTCCP) once every three years. The first of these plans will be a transition plan and will be for two years, 2004/05 and 2005/06. The first full three year plan will start in the 2006/07 year.

It is envisaged that the kerb and channel programme will continue to be shown in detail for five years with each planning cycle fixing a three year programme with a further two years being indicative only. So, for the first LTCCP a three year programme will be approved covering the two years of the plan plus the first year of the next plan. For the second and subsequent plans the three year programme will cover the second and third years of the three year LTCCP plus the first year of the next plan. Each will have a further two years shown as indicative only.

In summary, the desired outcome is that the first year of the new programme is reasonably fixed to give some certainty to the implementation process and to the residents of the streets. The political reprioritising and changes should be focused on the two to five year period.

SUSTAINABILITY ASSESSMENT (N+P+E)

An important consideration is the contribution this work makes to achieving a sustainable Christchurch. This means that social, environmental and financial considerations should be a part of the prioritisation process.

Environmental benefits come from the addition of green areas and improved streetscape, reduced traffic-induced noise and/or vibration, opportunities for enhanced stormwater disposal/quality and the improved facilities for public transport, cycleways and pedestrians, thus encouraging those modes of transport.

Social benefits come from improved streetscapes to encourage community involvement and activity.

Economic benefits come from replacing an aging asset thus providing the lowest lifecycle costs. Also improving 'major' roads mean a more efficient transport system thus contributing towards the community's economic sustainability.

It is noted that regardless of which project is on the programme the above benefits will be achieved to some extent. Therefore, in determining the programme, the focus should be on maximising the above benefits. The table below demonstrates how the rating system above does that.

FACTOR		SUSTAINABILITY FACTOR
Kerb and channel condition/functionality	45%	Economic, Natural
Carriageway condition	10%	Economic, Natural
Traffic hierarchy/volumes	10%	Economic
Existing shoulder crossfalls	5%	People
Maintenance cost savings - cleaning, street tree issues etc	5%	Economic
Proximity to schools, 'special needs' facilities, businesses, leisure facilities, etc	10%	People
User related issues - especially including safety - pedestrian, cyclist, motor-cyclist, car, passenger bus, tourist bus and heavy commercial vehicle)	15%	Natural, People
Ranking adjustments for 'other' factors such as "clustering" of adjacent streets, "Living Streets" projects, other projects, area plans		People, Natural

Recommendation: That the attached 'Kerb and Channel Replacement Prioritisation Framework' document be approved as the process around which the Kerb and Channel programme is developed and maintained.