



LEGISLATIVE ASSEMBLY

FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON ENVIRONMENT AND TRANSPORT AND CITY SERVICES

SUZANNE ORR MLA (CHAIR), CANDICE BURCH MLA (DEPUTY CHAIR), JAMES MILLIGAN MLA

Inquiry into referred 2017–18 Annual and Financial Reports

ANSWER TO QUESTION ON NOTICE

15 November 2018

Asked by Ms Nicole Lawder MLA:

Ref; TCCS Roads and Infrastructure 2.1

In relation to: Road Resealing

- 1) Of the 1 million square metres of resurfacing that was completed, how much of the resurfacing was:
 - a. Asphalt
 - b. Thin Asphalt (TOGAS)
 - c. Microsurfacing?
 - d. Any other type of materials?
- 2) How is it decided to use;
 - a. Asphalt
 - b. Thin Asphalt (TOGAS)
 - c. Microsurfacing?
 - d. Any other type of materials?
- 3) What are the advantages and disadvantages of
 - a. Asphalt
 - b. Thin Asphalt (TOGAS)
 - c. Microsurfacing?
 - d. Any other type of materials?
- 4) What is the life expectancy of:
 - e. Asphalt
 - f. Thin Asphalt (TOGAS)
 - g. Microsurfacing?
 - h. Any other type of materials?
- 5) Why was the municipal street resurfacing program below target?
- 6) On average how long does it take for potholes to be infilled?
 - i. On main arterial roads?
 - j. Municipal roads?

Mr Chris Steel MLA: The answer to the Member's question is as follows:–

1)

- a. Asphalt – 66,796 m²
- b. Thin Asphalt (TOGAS) – 8,553 m²
- c. Microsurfacing – 62,832 m²
- d. Chip seal – 850,097 m²

2) During the development of the annual resurfacing program, various surfacing treatment types are considered for each site. These treatments are not a direct alternative to each other, hence there is not a risk assessment of one against another in general. Pavement history and condition attributes such as cracking, roughness, skid resistance and rutting etc. are analysed using a computer-based pavement management system. As part of the process road deterioration models, traffic volume, road user cost, economic, social and environmental effects are analysed. The draft program including treatment for any particular road section is then generated. Finally the data is validated and the resurfacing program is finalised.

- a. Asphalt is significantly more expensive than other types of surface treatments used. It is normally reserved for critical locations like busy intersections or where the road has become so damaged that it needs to be reshaped.
- b. TOGAS provides a smooth finish with good skid resistance and less water spraying and noise on high speed high trafficked roads. It is applied over a chip seal as an alternative to deep lift asphalt.
- c. Microsurfacing produces a less textured, low noise surface like asphalt. However, unlike asphalt, it provides no additional structural strength and limited correction of deformities is available using this treatment. Unlike asphalt or chip seal, microsurfacing is not waterproof and often requires resealing to have been applied in the first instance. It costs more than resealing but less than asphalt.
- d. The chip seal treatment is a preventative maintenance treatment and is applied before the road surface deteriorates to the point where damage occurs that would require costly rehabilitation treatment. It is a very cost effective option when applied as a preventive measure before the base of the road is weakened by water and becomes deformed or badly potholed.

3)

| Treatment type | Advantages | Disadvantages |
|----------------|---|---|
| Asphalt | Good corrective treatment for structural damage at high stressed and high traffic loading areas. | Significantly more expensive than other types of surface treatments |
| TOGAS | Provides smooth road finish, good skid resistance Lower noise on high speed high trafficked road Lower cost, compared to an asphalt overlay | Non-structural surfacing, which requires the existing pavement to be in a sound structural condition for maximum performance Is applied over Chip seal |

| | | |
|----------------|--|---|
| Microsurfacing | Good corrective treatment for shape or skid and noise issues | Provides no additional structural strength and limited correction of deformities is available using this treatment Not waterproof and often needs to be applied over Chip seal |
| Chip seal | Cost effective preventative treatment that prolongs the serviceability of a road It provides excellent water proofing, good skid resistance | Generates loose stone for a period while road surface hardens |

4) The life expectancy is outlined below:

- e. Asphalt – up to 25 years
- f. Thin Asphalt (TOGAS) – up to 10 years
- g. Microsurfacing – up to 10 years
- h. Chip seal – up to 25 years

5) The 2017-18 resurfacing program was developed with proportionately a greater area of territorial roads. Priority was given to territorial road sites due to the higher risk profile of these roads (higher speeds ≥ 80 km and larger traffic volumes). This has resulted in a program exceeding the target of 5% of territorial roads and achieving a result of 3.5% of municipal roads.

6) It takes up to ten working days to repair potholes on both arterial and municipal roads.

Approved for circulation to the Standing Committee on Environment and Transport and City Services

Signature:



Date:

4/12/18

By the Minister for Roads, Mr Chris Steel MLA