

COUNCIL MEMBERS' MOTION

3. Regularizing Road Paint Maintenance for Safety

Submitted by: Councillor Fry

WHEREAS

1. The City of Vancouver is responsible for building and maintaining roads and public right of ways through the provision of surfacing, ice and hazard clearance, and road markings;
2. Road marking paints play a crucial role in maintaining safety and order on our roadways. Drivers, active transportation users and pedestrians alike, all rely on these markings for guidance, to inform of potential hazards, and regulate traffic flow. The presence and visibility of pavement marking paints help reduce collisions, confusion, and congestion;
3. Vision Zero, the international strategy to eliminate all traffic fatalities and severe injuries, through systemic road (re)design and addressing issues proactively before collisions, considers improved pavement markings as one important tool in the toolbox, a “quick build” solution to enhance road safety at (relatively) low cost.¹ According to the 2022 cost references compiled by Vision Zero Network and 3M, the average cost of a new “continental crosswalk” (aka zebra) is \$7.50 USD / sq ft.²;
4. Road marking paints are durable, highly reflective raised markers that are impact resistant and suitable for all weather conditions and road surfaces. Since the federal ban on oil-based paints³ in 2010, paints today are typically comprised of thermoplastic compounds, synthetic resin, glass beads, pigments, and fillers like limestone and sand for anti-skid properties. Paints are applied hot with specialized equipment to promote fast drying and strong adhesion to the road surface;
5. Road marking paints are critical for defining and delineating:
 - a. Hazards, stop lines, yields, medians, slow streets, sped limits, and wayfinding,
 - b. Traffic lines, turning lanes, direction of flow, merging, and lane changing,
 - c. Pedestrian walkways, crossings, elephant's feet, and zebra crosswalks,

¹ Springer Nature | The Vision Zero Handbook

<https://parachute.ca/wp-content/uploads/2022/12/The-Vision-Zero-Handbook.pdf>

² Vision Zero Network | Cost references for sample quick build traffic-calming treatments and road-safety countermeasures (retrieved from <https://visionzeronetwork.org/>)

<https://docs.google.com/presentation/d/1saKQBszXz8pSqvMwx74XmKudjKlhT26->

³ BC Ministry of Transportation and Infrastructure | The Evolving Story of Brighter, More Durable Line Painting

<https://www.tranbc.ca/2020/07/23/the-evolving-story-of-brighter-more-durable-line-painting/>

- d. Bike routes, unprotected bike lanes and boxes,
 - e. Bus zones and HOV lanes, and
 - f. Parking zones and restrictions;
6. Road marking paints are susceptible to more rapid wear due to high traffic volumes, heavier vehicles, and increasing impacts of climate change including damage caused variously by extreme heats, heavier rainfalls, and snow/ice removal that require abrasive and corrosive application of ploughs, sand and salt. Once the surface is damaged, water egress can further damage the substrate, especially during freezing and thawing;
 7. Damaged paint resulting in incomplete or degraded road markings can create compromised visibility for all road users, especially in rainy or dark conditions, and for active transportation users can further result in uneven surfaces that create potential surface hazards in particular for cyclists and micromobility road users;
 8. Various reports, social media posts and anecdotes suggest road and crosswalk visibility remain a hazard ⁴ that is top of mind for many Vancouverites;
 9. Many Canadian cities and provinces have regular scheduled full or (more typically) partial rotating road marking re-painting programs to proactively address wear and tear on surfacing, prevent substrate damage, and promote greater visibility and safety; and
 10. The City of Vancouver does not have a dedicated regularized program for road marking paint maintenance and instead resurfaces road markings on an as need ad hoc basis.

THEREFORE BE IT RESOLVED

THAT Council direct staff to report back with a regularized road marking maintenance plan, considering wear-and-tear, distribution of need, cost efficiencies, renewal cycle, and safety hierarchy in order to proactively address damaged road paint surfacing and improve safety for all road users;

FURTHER THAT Council request staff include a line item for consideration in the 2024 Budget and ongoing, dedicated to regular road marking paint maintenance.

⁴ CTV News Vancouver | Vancouverites want to see brighter, more visible roads
<https://bc.ctvnews.ca/vancouverites-want-to-see-brighter-more-visible-roads-1.6131119>