

## RESEARCH SUMMARY:

COST-BENEFIT ANALYSIS TO ESTIMATE THE POTENTIAL COST-EFFECTIVENESS OF THE WA GOVERNMENT IMPLEMENTING A POLICY TO RESTRICT UNHEALTHY FOOD AND DRINK ADVERTISING ON WA GOVERNMENT PROPERTY.

### PURPOSE

This document summarises the key findings from an [\*economic evaluation of the implementation of a policy to restrict unhealthy food and drink advertising on Western Australian \(WA\) state-owned assets\*](#). The study was commissioned by Cancer Council WA, with support from Heathway and conducted by Deakin Health Economics, Institute for Health Transformation, Deakin University.

### APPROACH

Cost-benefit analyses and cost-utility analyses were undertaken to ensure all stakeholders had the economic evidence needed to help support the implementation of the proposed policy. The analyses used a limited societal perspective.

#### 1. A cost benefit analysis (CBA)

A CBA was undertaken to compare the monetary benefits of the implementation of a policy to restrict unhealthy food and drink advertising on WA state-owned transport assets against its cost, compared to status quo.

A CBA is a type of economic evaluation that monetizes both the costs and benefits of a proposed policy action. The WA Department of Treasury's Strategic Asset Management Framework (SAMF) identifies that a CBA is the preferred quantitative evaluation method to steer government and commercial investment decisions. It is also the evaluation technique used by the transport sector.

Net present value (NPV) and benefit-cost ratios (BCR) were calculated to assess the value for money of the proposed policy. A positive NPV indicates that the societal benefit of the policy outweighs the cost and justifies pursuing the policy or program. A BCR greater than 1 means that the benefits outweigh the costs, making it a favourable investment.

#### 2. A cost-utility analysis (CUA)

A CUA was also conducted to compare the costs and outcomes of the policy (in terms of health-adjusted life years (HALYs) gained). A CUA is the most commonly used economic evaluation technique in the health sector.

### KEY FINDINGS

The analyses estimates that the proposed policy would generate a net present value (NPV) of \$1.9 billion and a benefit-cost ratio (BCR) of 59.

- In the primary analysis, the health gains were associated with a total monetary benefit of \$2 billion over a 30-year time horizon.
- This total monetary benefit includes healthcare cost savings of \$166 million and \$1.8 billion from the health gains valued using the value of statistical life year (VSLY) recommended by The Office of Impact Assessment.
- The model projected that the proposed policy would result in an average 0.92kg reduction in body weight for the greater Perth population which translates to 8,420 HALYs gained.
- The majority (81 per cent) of the costs were born by the WA Government estimated at \$27 million over the same time horizon which included potential revenue impact to government and cost of developing and monitoring the policy. The remaining costs were born by the advertising industry.

All sensitivity analyses showed that the intervention is likely to represent very good value-for-money.

- The most favourable NPV and BCR resulted when the analysis assumed that the policy would lead to no impact or less impact to government advertising revenue (given likely replacement), and when the analysis followed recommendations for conducting CBA for preventive health interventions (lifetime time horizon, 3 per cent discount rate and VSLY of \$314,774).
- Less favourable NPV and BCR result from phasing in the policy after 10 years (as would be the case if the policy is implemented when current contracts expire).
- Even with a 4-year time horizon there was a positive BCR and NPV (\$47 million).

The CUA indicated that the intervention is both cost-saving and health-promoting.

This study counters the arguments made by the advertising industry. Although government and industry are likely to accrue some revenue and profit losses, industry claims of substantial losses are not supported by our analyses.

## RESEARCH CONSIDERATIONS

- The proposed policy applies to WA Government transport assets including advertising on buses, trains, train stations, bridges, and roadside billboards.
- Criteria for unhealthy food and drinks to be restricted was categorised using the Council of Australian Governments (COAG) national interim guide to reduce children's exposure to unhealthy food and drink promotion. A recent study in 2021 found that the application of these COAG guidelines were able to identify more discretionary food products compared to other nutrient profiling models.
- Stakeholder consultation was undertaken in WA to clarify the most appropriate policy design and ascertain details regarding potential costs incurred by government and preferred parameters in CBA to inform government decisions.
- The effectiveness of the policy was based on the evaluation of a similar policy in the United Kingdom by Transport for London (TfL). Adjustments were made to effectiveness measures (effect on dietary intake) to account for differences in the policy parameters and population exposure to out of home (OOH) advertising.
- Different scenarios were tested for sensitivity analyses including alternative discount rates, differences in policy effectiveness based on population exposure to OOH, and changes to costs incurred such as lost advertising revenue.
- Several time horizons were used in the model including a 30-year time horizon as suggested by Treasury and a 4-year time horizon was added to illustrate impact within an election cycle.

## CONCLUSIONS

A policy restricting advertisements of unhealthy food and drinks on transport assets owned by the WA government is likely to be excellent value-for-money. These findings provide evidence and a compelling rationale for the WA government to implement this policy.

## REPORT DETAILS

Ananthapavan J, Angeles MR. (2023) *Economic evaluation of the implementation of a policy to restrict unhealthy food and drink advertising on Western Australian (WA) state-owned assets*. Perth: Cancer Council Western Australia.

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