



DC-295/Benning Road Interchange IMR Screening Results

19 concepts were developed to generate solutions for the DC-295/Benning Road interchange that address the project's Purpose and Need Statement. Concepts were evaluated through a two-tiered screening process to identify concepts that best meet the project's safety, connectivity, and operational objectives.

Screen 1

Qualitative Screening Criteria (Pass/Fail Evaluation)

Engineering/Constructability

- Construction feasibility
- Clearance issues/engineering constraints
- Property acquisition required

Safety and Operational Analysis

- Addresses safety concerns
- Number of interchange movements
- Effects on pedestrian and bicycle facilities
- Traffic operations

Construction Duration and Cost

- Cost and construction duration

Environmental and Community Effects

- Environmental justice communities
- Access to and from adjacent neighborhoods
- Environmental resources

Concepts	
1	Eliminated: Safety and Operational Deficiencies
2A	
2B	
2C	
3	
4	
5	Advanced For Further Evaluation in Screen 2
6	
7A	
7B	
7C	
7D	
8A	Eliminated: Merging Issues
8B	
8C	
8D	
9	Eliminated: Capacity Deficiencies and Visual Impacts
10A	
10B	

FAIL

PASS

FAIL

FAIL

Screen 2

Quantitative Screening Criteria (Weighted Scoring)

Raw Score

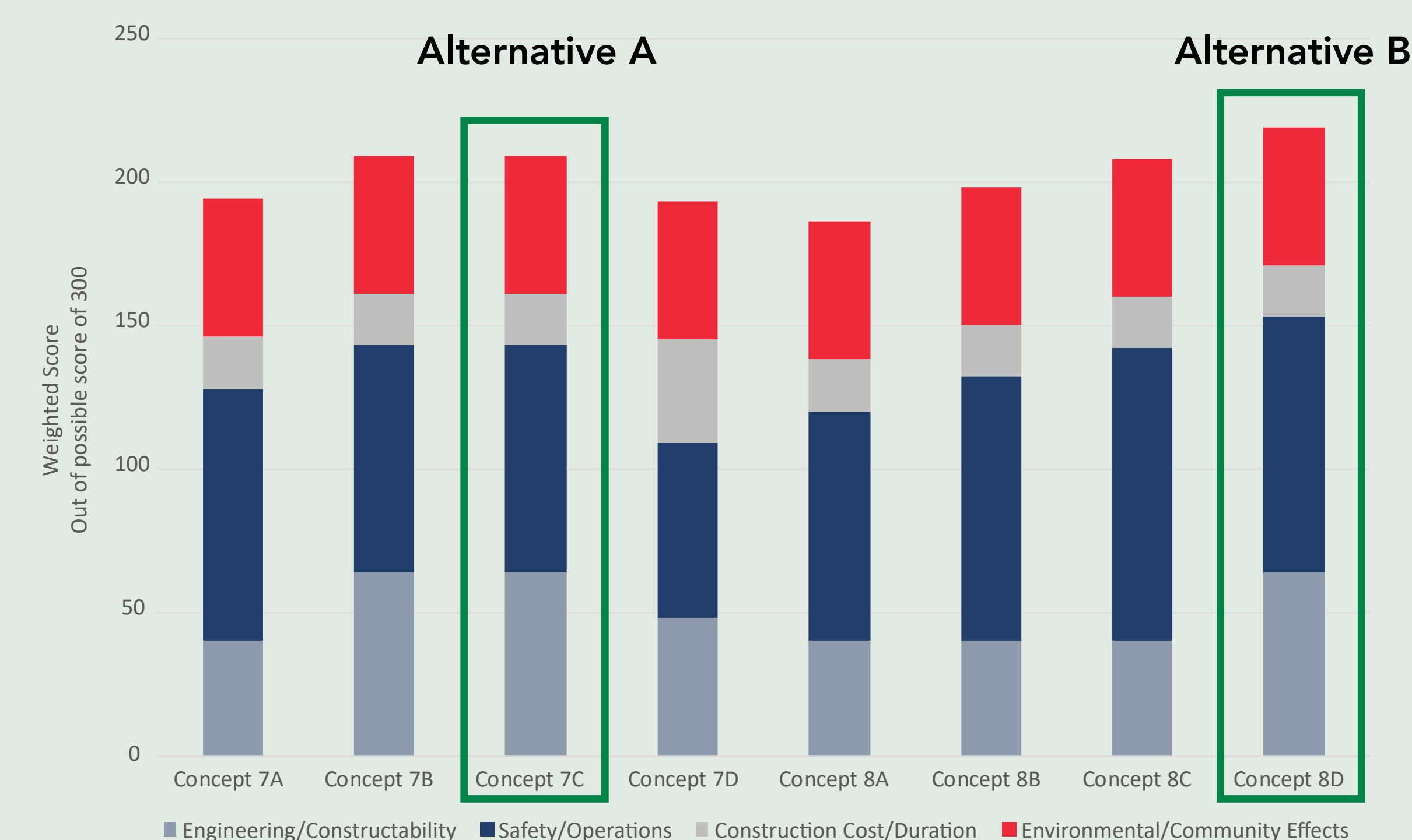
- Each concept was assigned a raw score of 0 (the worst) to 3 (the best) for each criterion

Weighting

- Each criterion was assigned a weighting factor based on relevance and importance to the screening process with Safety/Operations receiving the highest weighting

Weighted Scores = Raw Score x Weighting
Out of possible score of 300

Criteria	Weighting
Safety/Ops	40
Engineering/Constructability	24
Construction Duration/Cost	18
Environmental/Community Effects	18
Total	100



Alternative A (Concept 7C) and Alternative B (Concept 8D) were identified as the Build Alternatives after the two-tiered screening process

* Although Concept 7B and 7C result in the same weighted score, Concept 7C is preferable as it would carry a higher volume for vehicles heading westbound from Benning Rd to northbound DC-295 compared to 7B, which would accommodate a lower volume movement from DC-295 southbound to Benning Rd eastbound.