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THIRD ENGROSSED SUBSTITUTE SENATE BILL 5749

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State of Washington

57th Legislature

2001 Regular Session

By Senate Committee on Transportation (originally sponsored by Senators McAuliffe, Horn, Winsley, Oke and Haugen; by request of The Blue Ribbon Commission on Transportation)

READ FIRST TIME 03/08/01.

1 AN ACT Relating to cost-benefit analysis for transportation  
2 planning; amending RCW 47.05.010, 47.05.030, 47.05.035, 47.05.051, and  
3 47.06.130; and providing an effective date.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 **Sec. 1.** RCW 47.05.010 and 1993 c 490 s 1 are each amended to read  
6 as follows:

7 The legislature finds that solutions to state highway deficiencies  
8 have become increasingly complex and diverse and that anticipated  
9 transportation revenues will fall substantially short of the amount  
10 required to satisfy all transportation needs. Difficult investment  
11 trade-offs will be required.

12 It is the intent of the legislature that investment of state  
13 transportation funds to address deficiencies on the state highway  
14 system be based on a policy of priority programming having as its basis  
15 the rational selection of projects and services according to factual  
16 need and an evaluation of life cycle costs and benefits (~~and which~~)  
17 that are systematically scheduled to carry out defined objectives  
18 within available revenue. The state must develop analytic tools to use  
19 a common methodology to measure benefits and costs for all modes.

1 The priority programming system (~~shall~~) must ensure preservation  
2 of the existing state highway system, relieve congestion, provide  
3 mobility for people and goods, support the state's economy, and promote  
4 environmental protection and energy conservation.

5 The priority programming system (~~shall~~) must implement the state-  
6 owned highway component of the statewide (~~multimodal~~) transportation  
7 plan, consistent with local and regional transportation plans, by  
8 targeting state transportation investment to appropriate multimodal  
9 solutions (~~which~~) that address identified state highway system  
10 deficiencies.

11 The priority programming system for improvements (~~shall~~) must  
12 incorporate a broad range of solutions that are identified in the  
13 statewide (~~multimodal~~) transportation plan as appropriate to address  
14 state highway system deficiencies, including but not limited to highway  
15 expansion, efficiency improvements, nonmotorized transportation  
16 facilities, high occupancy vehicle facilities, transit facilities and  
17 services, rail facilities and services, and transportation demand  
18 management programs.

19 **Sec. 2.** RCW 47.05.030 and 1998 c 171 s 6 are each amended to read  
20 as follows:

21 The transportation commission shall adopt a comprehensive six-year  
22 investment program specifying program objectives and performance  
23 measures for the preservation and improvement programs defined in this  
24 section. In the specification of investment program objectives and  
25 performance measures, the transportation commission, in consultation  
26 with the Washington state department of transportation, shall define  
27 and adopt standards for effective programming and prioritization  
28 practices including a needs analysis process. The (~~needs~~) analysis  
29 process (~~shall~~) must ensure the identification of problems and  
30 deficiencies, the evaluation of alternative solutions and trade-offs,  
31 and estimations of the costs and benefits of prospective projects. The  
32 investment program (~~shall~~) must be revised biennially, effective on  
33 July 1st of odd-numbered years. The investment program (~~shall~~) must  
34 be based upon the needs identified in the state-owned highway component  
35 of the statewide (~~multimodal~~) transportation plan as defined in RCW  
36 47.01.071(3).

37 (1) The preservation program (~~shall~~) consists of those  
38 investments necessary to preserve the existing state highway system and

1 to restore existing safety features, giving consideration to lowest  
2 life cycle costing. The preservation program must require use of the  
3 most cost-effective pavement surfaces, considering:

- 4 (a) Life-cycle cost analysis;
- 5 (b) Traffic volume;
- 6 (c) Subgrade soil conditions;
- 7 (d) Environmental and weather conditions;
- 8 (e) Materials available; and
- 9 (f) Construction factors.

10 The comprehensive six-year investment program for preservation  
11 (~~shall~~) must identify projects for two years and an investment plan  
12 for the remaining four years.

13 (2) The improvement program (~~shall~~) consists of investments  
14 needed to address identified deficiencies on the state highway system  
15 to increase mobility, address congestion, and improve (~~mobility,~~)  
16 safety, support for the economy, and protection of the environment.  
17 The six-year investment program for improvements (~~shall~~) must  
18 identify projects for two years and major deficiencies proposed to be  
19 addressed in the six-year period giving consideration to relative  
20 benefits and life cycle costing. The transportation commission shall  
21 give higher priority for correcting identified deficiencies on those  
22 facilities classified as facilities of statewide significance as  
23 defined in RCW 47.06.140. Project prioritization must be based  
24 primarily upon cost-benefit analysis, where appropriate.

25 The transportation commission shall approve and present the  
26 comprehensive six-year investment program to the legislature in support  
27 of the biennial budget request under RCW 44.40.070 and 44.40.080.

28 **Sec. 3.** RCW 47.05.035 and 1993 c 490 s 4 are each amended to read  
29 as follows:

30 (1) The department and the commission shall use the transportation  
31 demand modeling tools developed under subsection (2) of this section to  
32 evaluate investments based on the best mode or improvement, or mix of  
33 modes and improvements, to meet current and future long-term demand  
34 within a corridor or system for the lowest cost. The end result of  
35 these demand modeling tools is to provide a cost-benefit analysis by  
36 which the department and the commission can determine the relative  
37 mobility improvement and congestion relief each mode or improvement

1 under consideration will provide and the relative investment each mode  
2 or improvement under consideration will need to achieve that relief.

3 (2) The department will participate in the refinement, enhancement,  
4 and application of existing transportation demand modeling tools to be  
5 used to evaluate investments. This participation and use of  
6 transportation demand modeling tools will be phased in. The first  
7 phase will build upon the modeling work initiated by the four-county  
8 Puget Sound regional council.

9 (3) In developing program objectives and performance measures, the  
10 transportation commission shall evaluate investment trade-offs between  
11 the preservation and improvement programs. In making these investment  
12 trade-offs, the commission shall evaluate, using cost-benefit  
13 techniques, roadway and bridge maintenance activities as compared to  
14 roadway and bridge preservation program activities and adjust those  
15 programs accordingly.

16 (4) The commission shall allocate the estimated revenue between  
17 preservation and improvement programs giving primary consideration to  
18 the following factors:

19 ~~((1))~~ (a) The relative needs in each of the programs and the  
20 system performance levels that can be achieved by meeting these needs;

21 ~~((2))~~ (b) The need to provide adequate funding for preservation  
22 to protect the state's investment in its existing highway system;

23 ~~((3))~~ (c) The continuity of future transportation development  
24 with those improvements previously programmed; and

25 ~~((4))~~ (d) The availability of dedicated funds for a specific type  
26 of work.

27 **Sec. 4.** RCW 47.05.051 and 1998 c 175 s 12 are each amended to read  
28 as follows:

29 The comprehensive six-year investment program shall be based upon  
30 the needs identified in the state-owned highway component of the  
31 statewide multimodal transportation plan as defined in RCW 47.01.071(3)  
32 and priority selection systems that incorporate the following criteria:

33 (1) Priority programming for the preservation program shall take  
34 into account the following, not necessarily in order of importance:

35 (a) Extending the service life of the existing highway system,  
36 including using the most cost-effective pavement surfaces, considering:

37 (i) Life-cycle cost analysis;

38 (ii) Traffic volume;

1        (iii) Subgrade soil conditions;  
2        (iv) Environmental and weather conditions;  
3        (v) Materials available; and  
4        (vi) Construction factors;  
5        (b) Ensuring the structural ability to carry loads imposed upon  
6 highways and bridges; and  
7        (c) Minimizing life cycle costs. The transportation commission in  
8 carrying out the provisions of this section may delegate to the  
9 department of transportation the authority to select preservation  
10 projects to be included in the six-year program.  
11        (2) Priority programming for the improvement program shall take  
12 into account the following:  
13        (a) Support for the state's economy, including job creation and job  
14 preservation;  
15        (b) The cost-effective movement of people and goods;  
16        (c) Accident and accident risk reduction;  
17        (d) Protection of the state's natural environment;  
18        (e) Continuity and systematic development of the highway  
19 transportation network;  
20        (f) Consistency with local comprehensive plans developed under  
21 chapter 36.70A RCW;  
22        (g) Consistency with regional transportation plans developed under  
23 chapter 47.80 RCW;  
24        (h) Public views concerning proposed improvements;  
25        (i) The conservation of energy resources;  
26        (j) Feasibility of financing the full proposed improvement;  
27        (k) Commitments established in previous legislative sessions;  
28        (l) Relative costs and benefits of candidate programs;  
29        (m) Major projects addressing capacity deficiencies which  
30 prioritize allowing for preliminary engineering shall be reprioritized  
31 during the succeeding biennium, based upon updated project data.  
32 Reprioritized projects may be delayed or canceled by the transportation  
33 commission if higher priority projects are awaiting funding; ((and))  
34        (n) Major project approvals which significantly increase a  
35 project's scope or cost from original prioritization estimates shall  
36 include a review of the project's estimated revised priority rank and  
37 the level of funding provided. Projects may be delayed or canceled by  
38 the transportation commission if higher priority projects are awaiting  
39 funding; and

1       (o) Congestion reduction.

2       (3) The commission may depart from the priority programming  
3 established under subsections (1) and (2) of this section: (a) To the  
4 extent that otherwise funds cannot be utilized feasibly within the  
5 program; (b) as may be required by a court judgment, legally binding  
6 agreement, or state and federal laws and regulations; (c) as may be  
7 required to coordinate with federal, local, or other state agency  
8 construction projects; (d) to take advantage of some substantial  
9 financial benefit that may be available; (e) for continuity of route  
10 development; or (f) because of changed financial or physical conditions  
11 of an unforeseen or emergent nature. The commission or secretary of  
12 transportation shall maintain in its files information sufficient to  
13 show the extent to which the commission has departed from the  
14 established priority.

15       (4) The commission shall identify those projects that yield freight  
16 mobility benefits or that alleviate the impacts of freight mobility  
17 upon affected communities.

18       **Sec. 5.** RCW 47.06.130 and 1993 c 446 s 13 are each amended to read  
19 as follows:

20       (1) The department may carry out special transportation planning  
21 studies to resolve specific issues with the development of the state  
22 transportation system or other statewide transportation issues.

23       (2) The department shall conduct multimodal corridor analyses on  
24 major congested corridors where needed improvements are likely to cost  
25 in excess of one hundred million dollars. Analysis will include the  
26 cost-effectiveness of all feasible strategies in addressing congestion  
27 or improving mobility within the corridor, and must recommend the most  
28 effective strategy or mix of strategies to address identified  
29 deficiencies. A long-term view of corridors must be employed to  
30 determine whether an existing corridor should be expanded, a city or  
31 county road should become a state route, and whether a new corridor is  
32 needed to alleviate congestion and enhance mobility based on travel  
33 demand. To the extent practicable, full costs of all strategies must  
34 be reflected in the analysis. At a minimum, this analysis must  
35 include:

36       (a) The current and projected future demand for total person trips  
37 on that corridor;

38       (b) The impact of making no improvements to that corridor;

1        (c) The daily cost per added person served for each mode or  
2 improvement proposed to meet demand;

3        (d) The cost per hour of travel time saved per day for each mode or  
4 improvement proposed to meet demand; and

5        (e) How much of the current and anticipated future demand will be  
6 met and left unmet for each mode or improvement proposed to meet  
7 demand.

8        The end result of this analysis will be to provide a cost-benefit  
9 analysis by which policymakers can determine the most cost-effective  
10 improvement or mode, or mix of improvements and modes, for increasing  
11 mobility and reducing congestion.

12        NEW SECTION. Sec. 6. This act takes effect July 1, 2002.

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