State of California
AIR RESOURCES BOARD

RESEARCH PROPOSAL

Resolution 10-6

February 25, 2010

Agenda Item No.: 10-2-1

WHEREAS, the Air Resources Board (ARB or Board) has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code sections 39700 through 39705;

WHEREAS, a research proposal, number 2692-266, entitled "Quantifying the Effect of Local Government Actions on Vehicle-Miles of Travel (VMT)," has been submitted by the University of California, Davis (UC Davis);

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee (RSC) has reviewed and recommends for funding:

> Proposal Number 2692-266 entitled "Quantifying the Effect of Local Government Actions on VMT," submitted by UC Davis, for a total amount not to exceed $125,000.

NOW, THEREFORE, BE IT RESOLVED that ARB, pursuant to the authority granted by Health and Safety Code section 39703, hereby accepts the recommendation of RSC and approves the following:

> Proposal Number 2692-266 entitled "Quantifying the Effect of Local Government Actions on VMT," submitted by UC Davis, for a total amount not to exceed $125,000.

BE IT FURTHER RESOLVED that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein, and as described in Attachment A, in an amount not to exceed $125,000.

I hereby certify that the above is a true and correct copy of Resolution 10-6, as adopted by the Air Resources Board.

Sandra Bannerman, Clerk of the Board

ATTACHMENT A

Quantifying the Effect of Local Government Actions on VMT

Background
On-road vehicles generate the largest source of California's greenhouse gas (GHG) emissions. Assembly Bill (AB) 32 and Executive Order S-03-03 establish aggressive targets to reduce California's GHG emissions. Senate Bill (SB) 375 requires Air Resources Board (ARB) to develop regional targets to reduce GHG emissions and Vehicle Miles Traveled (VMT). It also requires California regions to prepare Sustainable Community Strategies to identify a set of actions at the regional level to reduce transportation GHG emissions down to target levels. Achieving the goals of AB 32 and SB 375 will require a strong partnership between regional and local governments. A number of studies have been conducted to explore the relationship between travel behavior and local government actions. However, most of these studies are only able to provide some directional interpretation of their results such as whether a local government action would have a positive or negative effect on reducing VMT.

Objective
The objective of this proposed study is to quantify local government policy decisions and their effect on VMT as a function of the local context. A tool will be developed for use by local governments that translate findings into a practical approach useful for improving policy choices to reduce local and regional VMT.

Methods
The investigators will estimate a statistical model that identifies the elasticity of commute trip VMT, shopping trip VMT, and total household VMT with respect to a variety of policy-relevant variables depending on the local land use transportation context and the socioeconomic characteristics of the commuter, shopper, and household, respectively. The estimates will include a focus on context sensitivity.

Expected Results
Results of this research are expected to quantify the effect of local government actions on reducing VMT. This information is expected to provide local and regional assistance to meet statewide targets to reduce GHG emissions and overall VMT.

Significance to the Board
ARB is the lead agency implementing AB 32 and SB 375. This study will provide local and regional assistance to meet statewide targets to reduce overall VMT and GHG emissions as mandated by SB 375 and AB 32.

Contractor:
University of California, Davis

Contract Period:
36 months

Principal Investigator (PI):
Deborah Salon, Ph.D.

Contract Amount:
$125,000

Basis for Indirect Cost Rate:
The State and the UC system have agreed to a ten percent indirect cost rate.

Past Experience with this Principal Investigator:
Dr. Deborah Salon will serve as the principal investigator conducting the work to compile, clean, and analyze data as well as coordinating the project with the research team which includes several recognized world leaders in the area of land use and transportation planning. Dr. Salon has conducted similar work in the past with non-California data, which makes her an ideal person to fulfill this role.

Prior Research Division Funding to UC Davis:

Year	2008	2007	2006
Funding	$ 1,209,135	$ 935,020	$ 1,684,890

BUDGET SUMMARY

Contractor: University of California, Davis

Quantifying the Effect of Local Government Actions on VMT

DIRECT COSTS AND BENEFITS				
1.	Labor and Employee Fringe Benefits	$	97,062	
2.	Subcontractors	$	15,994	
3.	Equipment	$	0	
4.	Travel and Subsistence	$	1,200	
5.	Electronic Data Processing	$	0	
6.	Reproduction/Publication	$	150	
7.	Mail and Phone	$	150	
8.	Supplies	$	234	
9.	Analyses	$	0	
10.	Miscellaneous	$	300	
	Total Direct Costs			$115,090
INDIRECT COSTS				
1.	Overhead	$	9,910	
2.	General and Administrative Expenses	$	0	
3.	Other Indirect Costs	$	0	
4.	Fee or Profit	$	0	
	Total Indirect Costs			$9,910
TOTAL PROJECT COSTS				**$125,000**

SUBCONTRACTORS' BUDGET SUMMARY

Subcontractor: University of California, Irvine

Description of subcontractor's responsibility: UC Irvine is heading up a land use planning track for the new UC-wide Multi-campus Research Program Initiative on Sustainable Transportation for California. UC Irvine will participate as an essential collaborator on both the analysis and the reports for this project.

DIRECT COSTS AND BENEFITS				
1.	Labor and Employee Fringe Benefits	$	14,040	
2.	Subcontractors	$	0	
3.	Equipment	$	0	
4.	Travel and Subsistence	$	500	
5.	Electronic Data Processing	$	0	
6.	Reproduction/Publication	$	0	
7.	Mail and Phone	$	0	
8.	Supplies	$	0	
9.	Analyses	$	0	
10.	Miscellaneous	$	0	
	Total Direct Costs			$14,540
INDIRECT COSTS				
1.	Overhead	$	1,454	
2.	General and Administrative Expenses	$	0	
3.	Other Indirect Costs	$	0	
4.	Fee or Profit	$	0	
	Total Indirect Costs			$1,454
TOTAL PROJECT COSTS				**$15,994**