

CONTENTS

Chapter	Page
I. Introduction	3
Purposes of This Study	4
Conceptual Framework.	5
Review of the Literature	5
Guide lines for Congress	5
Format of the Study	6
II. The Historical Context of Demonstrations	9
The R&D Tradition	9
Agriculture	9
National Defense.	10
Basic and Applied Research	11
Domestic Public Policy	11
Regulation	12
Energy	13
Conclusions	13
The Social Action Tradition	14
Conclusions	15
III. A Conceptual Framework for the Consideration of Demonstration Projects in Federal R&D Policy	19
The Purposes of Demonstrations	19
Demonstrations in the R&D Tradition	19
Demonstrations as Instruments in the Political Process	21
General Factors Affecting the Success of Demonstrations	22
The Technology	22
The Institutional Environment	24
IV. Factors Affecting the Success of Demonstrations	31
Factors Affecting the Success of Policy-Implementing Demonstrations	31
Technologies With Low Reproducibility.	31
Technology That Is Well in Hand	33
Demonstrations in Well-Developed Institutional Environments.	34
Requirements for Cooperative Efforts	34
User Need.	35
Time and Operational Flexibility	36
Factors Affecting the Success of Policy-Formulating Demonstrations	37
Perceived Quality	38
Perceived Relevance.	38
Continuing Close Ties With Policymakers	40
Including Points of Conflict in Demonstration Design	40
V. Implications for Congress	45
Reasons for Use of Demonstration Projects	45

CONTENTS—continued

Chapter	Page
The Demonstration Project as a Political Tool	45
The Absence of Alternatives to Demonstration Projects	45
The Demonstration as an Instrument of Transition: Inherent Difficulties	46
Incentives for Government Agencies to Use Demonstrations	46
Implications for Congress	47
Alternative Strategies to Promote the Use of R&D	48
Change Market Incentives	49
Modify the Institutional Environment	49
Subsidize Local Development	50
Utilize Existing Projects	50
Suggested Questions To Be Examined in Congressional Review of Demonstration Projects	51
The Future Useof Demonstration Projects	53
Bibliography	57
Acknowledgments	59