

Part I: Introduction

What is Policy Options Analysis?

Policy Options Analysis is a structured way to invent, evaluate, and choose alternative courses of action. It involves looking into the future to predict what will happen as a result of different actions we might take and then recommending actions that will lead to the best outcomes.

Policy Options Analysis is practical business. It is concerned with both what is and what should be, with both objective and normative questions.

The “pure” social sciences strive for ever greater objectivity, but policy options analysis requires direct engagement with practical life.

- As a form of *analysis*, policy options analysis requires an effort to be objective, to apply relevant theories, to build rigorous models, to derive quantitative measures of efficiency and effectiveness.
- But because the purpose of policy analysis is to inform and support *policy choices*, it also requires attention to a community’s values, goals, and interests, all of which cannot be derived through a strictly objective process.

In other words, to do good policy options analysis, you need to be able to stand back to get a broader perspective, but you also need to be willing to step in and get your hands dirty.

Why Bother with Policy Options Analysis?

Given that it takes time and energy, it is reasonable to ask why we should bother with policy options analysis. Why not just defend the policies that your agency is already pursuing? Why not just argue for what seems right on the basis of your team's experience?

Besides being a good way to organize thesis work, policy options analysis can help you in three ways. It can:

- increase your chances of choosing, or shaping, policies that will really work without costing too much;
- build a community of practitioners and stakeholders, of friends and advisors, who as a group will be able to formulate better policy; and
- package your policy preferences in a way that will win more support—and perhaps feel more justified in asking people to accept difficult changes.

How Does Policy Options Analysis Fit in?

Policy analysis covers a wide range of approaches, all of which may be suitable for thesis projects relating to homeland security. All of these approaches seek to impose greater rigor on the everyday process of trying out solutions, learning from errors, and improving things as you go along.

Some may make an *exploratory study* of a problem to determine the nature of a threat and an estimate of how serious it is. Such a study might collect new data, or it might focus on careful *review of existing knowledge* about a particular problem. Others will undertake a *policy history*, which uncovers the changing ways policy-makers and stake-holders have sought to understand and solve a problem. Some may wish to document their experiences with developing or implementing a policy, using the *participant observer* approach. And others may wish to perform a *program assessment* to measure how well a particular policy achieves its goals.

This module on policy options analysis introduces a comprehensive approach that pulls together many of the other tools used in policy analysis. This is the classic approach, which may combine a little from each of the other approaches. In a way, it represents the overall goal to which other forms of analysis contribute in different ways.

Your thesis project may just take on one piece of a complete policy options analysis: exploration; review of existing knowledge; or program assessment. It will still be useful for you to gain some familiarity with policy options analysis. It's one framework in which your project takes on a broader significance; it's one way to fit your project into the bigger picture.

A Step-by-Step Approach

This module presents policy analysis as a process with seven steps:

1. Define the Problem
2. Construct Alternative Solutions
3. Select Criteria for Judging Success
4. Project the Outcomes from Alternative Solutions
5. Analyze Trade-Offs between Outcomes
6. Choose the Best Solution
7. Explain Your Recommendation

By following these steps, you will be able to move from a poorly defined problem to clear policy recommendations, to solid results that will stand up to critical review.

A Conceptual Guide

The seven steps form a template that can guide you through the policy analysis process. Of course, the steps are really meant as a *conceptual guide*, not simply a recipe for you to follow.

Good policy options analysis is an approximate, iterative, shared activity. You should plan to approximate, repeat, and share.

Approximate: Sketch out a rough approximation of your results right away. I suggest that you prepare a first draft today—or tonight, if you are a night person.

An approximation will help you in two ways. First, it will make the project seem more manageable. Second, if you write down your approximate results on the basis of rough estimates of what you expect to find, you can be alert to the significance of any information that would tend to call into question your expected results.

This is the key point: Once you stumble on something you do not expect you will know that you need to slow down and try to figure out what is going on.

When time and energy are limited, the back-of-the-envelope version often stacks up quite well, at least when compared to doing one part of the process carefully and skimming over the rest. Start out quick and dirty; add bells and whistles later.

Repeat: It's also good to be ready to redo your work as you develop a better feel for your project. Each step may need to be repeated to take account of the results from later steps. Don't worry about throwing away work that you've already done.

Share: As you go along, it's a good idea to share your emerging results. Show your first cut to people you trust, close allies and friends, who can give you encouragement. Outline your tentative results to important stakeholders, as a way to learn about their perspectives and possibly preempt some of their concerns. Submit later drafts for further discussion, or organize a table top exercise, to fine tune your results and build consensus.

Part II: The Seven Steps¹

The Seven Steps

To repeat, your analysis will go through these seven steps:

1. Define the Problem
2. Construct Alternative Solutions
3. Select Criteria for Judging Success
4. Project the Outcomes from Alternative Solutions
5. Analyze Trade-Offs between Outcomes
6. Choose the Best Solution
7. Explain Your Recommendation

This section will explain each of the seven steps and suggest a few pointers on how to get better results.

¹ This section presents a model for policy analysis derived from Eugene Bardach's little guide, *A Practical Guide for Policy Analysis* (New York: Seven Bridges Press, 2000). Note: I omit Bardach's second stage, "Assemble Some Evidence," to make the logic of policy options analysis clearer. You will need to assemble evidence at several points in the process. And we've already covered how to review existing knowledge in earlier modules. Besides, seven is a magic number.

Your Result: A Policy Outcomes Matrix

Your basic result will be a policy outcomes matrix that shows the projected outcomes for different policy solutions. This will look something like this:

		Policy Options Matrix							
Policy		Effectiveness	Cost	Legality	Political	Acceptability			
A		good	high	no	good				
B		fair	high	yes	poor				
C		poor	low	yes	poor				

Your report will explain how you decided what to put in each cell of your matrix and the reasons for your overall recommendations.

First Step: Define the Problem

In general, the problem you need to solve will come from your boss, your client, or your community. And it will typically be defined in terms of threats to counter or goals to achieve. You will often know that your actions need to respect certain constraints or norms.

It's important to grasp the *accepted understanding* of the problem. You should probably try to write out the problem in clear language—just to make sure you have it straight.

Test Accepted Understandings of the Problem

But once you nail down what other people think the problem is, you will still not be done. A big part of your job as a policy analyst will be to refine or even recast the language and concepts that people have used. Right from the start, it is important to think hard about the assumptions people make about the problem, to test the language and symbols used to characterize the problem, and to explore its social and political “environment.”

- **Assumptions:** At the outset, it is a good idea to try to identify and question some of the *assumptions* behind the problem definition. For example, your community or client may have defined the problem as a clear choice between two potential solutions. If so, it is a good idea to ask if there are any other alternatives—or if the two, seemingly incompatible, solutions might be combined to achieve better effects.
- **Metrics:** It can be useful to try to find different *metrics* for the problem. Some problems can be described as a matter of too much or too little of something. Others seem to resist quantification, but it can be illuminating to try to invent a mathematical description for them.
- **Cause and Effect:** You should check to see if the problem has been defined in a way that includes a hidden set of claims about causality (or a buried diagnosis). Of course, if such assumptions are correct, they will point toward possible solutions. But if causal assumptions are wrong, they may lead you away from viable solutions. If so, you may wish to probe the causal relationship assumed by the diagnosis.
- **Environment:** You should also explore the social and political context for the problem. Who is a stakeholder in the process? What strengths and weaknesses do we have to confront the problem? What are the external threats and opportunities that arise in connection with the problem?

It's not unusual to find the “real problem” you need to solve is some piece or aspect of the larger whole. This will help you narrow your research question down some more—almost always a good move.

Checking Back

After you work through each of the later steps in the process, you should come back to check your problem definition. As you learn more about your problem, you will gain both a deeper knowledge of the specifics and a broader perspective on how the problem fits in with other issues.

Ask for Help

During the first stage, when you are exploring different definitions for the problem, it may make sense to bounce ideas off a friend who knows nothing in particular about the discipline(s) and field(s) that usually take charge of such problems. Your friend may ask questions about aspects of the problem that established practitioners have already set standard answers for. Who knows? They may be wrong.

Second Step: Construct Alternative Solutions

In the second step, you work out alternative solutions for your problem. This step really involves two opposite moves: a) collecting and inventing possible solutions, and b) reducing and simplifying your list of solutions.

a. Collecting and Inventing Solutions

Of course, in most cases, other people have already proposed solutions for problems that concern them, and you should include these existing solutions in your initial list.

And for the sake of completeness, you will probably want to include as an option the idea of allowing current trends to continue (that is, to *choose* not to change current actions).

You should also try to formulate new solutions. This is where your creativity can come out.

Two ways to do this include applying “generic” solutions and deriving policy solutions from actions used to address similar problems.

i. Generic Tools: Here are a couple of generic solutions, all of which involve shifting around economic and political ground rules that govern individual or institutional behavior that contributes to the problem. Options include:

- introducing market mechanisms;
- imposing regulations; and
- instituting direct public control.

ii. Analogies: Another way to identify solutions is to adapt solutions that others have found for analogous problems.

- For example, you could look at the literature on deterrence or counter-insurgency to consider whether options matrices found there might be modified and applied in counter-terrorism.

Again, you could look at debates in another professional discipline or policy-making community and sketch out how they would attack your problem.

- Examples could come from other first responders or other government sectors. You could also check with people in different sectors, such as public and private health care; elementary or secondary education; and transportation. (Of course, in the CHDS program, a good way to do this is to ask other participants in the program how they and their friends would attack the problem.)

Finally, you could look at the practices used by another level of government (local, regional, state or federal) to address the same or similar problems.

- In particular, you may wish to compare sectors in which the public feels empowered to become actively involved—such as public education—with sectors in which the experts tend to keep the public at bay—such as medicine or technology.

b. Reduce and Simplify Alternative Solutions

Your second move will be to group the different possible solutions you have identified into “families” of solutions. You may want to examine solutions proposed by opposing parties in a debate to see what points they agree on and where they disagree. The participants in a policy debate that is highly politicized may move closer towards agreement if you can show there is another way to slice and dice what look like incompatible alternatives.

Here are different ways to do this.

i. First, ask *who would act* to solve the problem.

- Will it be local, county, regional, state, federal or international authority?
- Will it be a business, a club or a non-profit group.
- Will it be individuals or families?

ii. Second, ask *what will motivate* people to modify their behavior.

- Will terrorists be deterred by fear, by political gains, by an offer of amnesty?
- Will first responders agree to cross-train to follow orders, to get a raise, to learn new things, or to make friends in a broader community?

iii. Third, ask *who will pay the costs*, monetary or other, for the solution?

If you're feeling ambitious, you may wish to construct a matrix that compares possible solutions for each of the three dimensions mentioned above.

The goal at this stage is to construct a small set of simplified alternative solutions from which you will later choose one.

- Once you decide which solution stands out as better, you can go back and select one of the variants of that type (or modify one of the variants to make it more effective).

Note that you are getting closer to the payoff: among the solutions you identify in this stage you will probably find the outline for the one you will end up recommending. Of course, you will need to test the alternative solutions (in steps three to five) before you can choose the best one. But you're already hitting pay dirt.

Now that you have identified alternative solutions, you should check back to see if they are solutions to the problem you started with. If not, this would be a good time to either find new solutions—or revise the definition of your problem.

Third Step: Select Criteria for Judging Success

The third step is to select criteria against which you will test the projected outcomes (in step four) for each of the alternative solutions you have constructed (in step two).

Once again, this step will require two opposite impulses: a) to generate a list of applicable criteria, and b) to rank the criteria.

Objective and Normative Aspects of Criteria Selection

Policy options analysis involves both objective and normative questions; it is concerned with both *what is* and *what should be*. When policy analysts select criteria for judging policy outcomes, they move away from objective, technical issues and towards normative judgments. This is not a bad thing, just something to keep in mind.

There are two main sources for criteria and the values that inform them. First, the criteria will be derived in part from the definition of the problem. The problem's stakeholders have concerns and values, and these concerns and values should be reflected in the criteria. Second, the criteria should also grow out of the values and culture of the client, agency or community that will implement the policy your analysis supports or recommends.

a) Build a list of criteria

The criteria you will select will derive from your specific problem, from your stakeholders' goals, and from your community's or culture's values.

The following checklist of generic policy criteria may help you compile your list.

1. Effectiveness:

How effective will the policy be? How well will it work?

2. Legal and Constitutional Standards

Does the policy and the means to implement it comply with applicable law and the Constitution?

3. Political Acceptability

Is it possible to get the policy through the political process? What will be the political costs—and benefits—of doing so?

4. Externalities

What will be the second-order effects of implementing the policy? How will it influence the operation of other government programs? To what degree will it distort markets for competing or complementary products? How will it influence the struggle for power and place in your organization?

5. Efficiency

Is the policy efficient? How well will it use public and private resources? What will be the balance between the policy's aggregate costs and benefits?

6. Equity

Is the policy fair? How will the benefits and costs of the policy be shared out among the stakeholders? Among the public as a whole?

7. Implementation

Can the policy be implemented? Is it robust: will it still work even if the process of implementation waters it down or distorts it? Can it be improved: can stakeholders modify the policy during the implementation process to get better results?

8. Metrics for Success

How well can the effects of the policy be measured? How will we know if we are winning?

9. Motherhood and Apple Pie

Does the policy validate important shared values (or appear to do so)? Does it violate community taboos?

Once you have developed your list, you should note which criteria can be achieved by simply achieving a certain minimum standard (e.g., stand up to court challenges) and which involve maximizing (or minimizing) certain outcomes (e.g., decrease the number of injuries and deaths caused by a disaster).

b) Rank Criteria

Some of the criteria you have identified may compete with others, in which case you will need to find a way to rank them.

One solution would be to identify the issues involved and trust to the political or bureaucratic process to decide how to weigh alternatives.

Another approach is to use a decision matrix to try to establish the importance of each criterion.

Of course, this may be a point at which it makes sense to draw upon a larger community. Instead of simply working out the ranking by yourself, you may wish to pull in key stakeholders, or to organize a survey of people who will be affected by your choice, to help set rankings.

Once you have selected criteria against which you will test the projected outcomes from each alternative solution, you should check back to see if they really address the problem you started with. If not, this would be a good time to revise the definition of your problem.

Fourth Step: Project Outcomes from Alternative Solutions

In the fourth step, you will build an outcomes matrix that shows expected *outcomes* from each of the alternative solutions you have constructed (in step two) in terms of each of the *criteria* you selected (in step three).

Your result will look something like this:

Policy Options Matrix								
Policy	Effectiveness	Cost	Legality	Political	Acceptability	Extensibility	Equity	Efficiency
A	good	high	no	good	high	high	high	high
B	fair	high	yes	poor	low	low	low	low
C	poor	low	yes	poor	low	low	low	low

You should probably prepare two versions of the outcomes matrix, one that contains the details you discover as you are working, and another simplified version for your final report. In either case, your outcome matrix will be the one chart in your report that everyone studies, so you should make sure that it is clear and that you have indicated the units in which each outcome is measured. If needed you may use verbal descriptors, such as “very good” or symbols such as plus or minus, up or down.

It may seem difficult, or at least risky, to predict the effects of future actions. All of us have experienced things that did not turn out at all the way we expected. There is a great temptation to be optimistic about the future of our own creations. But if we write down clear predictions, we will almost certainly end up taking positions that will certainly be more or less *wrong*. As a result, we may be tempted to retreat to a sort of prudent pessimism. Although it's hard to strike a balance, the goal is to prepare *realistic* projections.

Here are a couple of methods that will help rein in emotions while liberating imaginations: applying a model and creating scenarios.

a) Use Models to Project Results

One way to make the business of imagining outcomes a bit more objective is to use explicit models to project results.

These models can be drawn from the various social sciences—or you can make up your own. The most commonly used models in policy analysis draw on economics, political science, and sociology. You should use whatever theories you're comfortable with, or whatever approaches are prominent in the fields that typically “own” problems like the one you are working on.

I've just mentioned theory, but I'm not suggesting that you get bogged down in academic constructs. For the purposes of policy options analysis, it makes sense to start with a simpler version of a formal model and to relax the standards for both proof and elegance that dominate more theoretical work.

- That is, while it might be nice to establish the “truth” of the model you construct, for the purposes of policy analysis, it will be enough if the model helps you make projections that are better than simple guesses.
- Most academic social science tries to construct simple, powerful models that will predict the most crucial outcomes. But for policy analysis it will be important to try to predict outcomes along all of the criteria that are important to stakeholders, even if this involves combining several different models in a somewhat messy combination.
- If you use a model, even a simple model, you will be in effect claiming that certain causal relationships hold. One advantage of thinking about these causal relationships is that it may help you identify the conditions required for a policy alternative to generate a projected outcome.

When we discussed how to categorize policy alternatives, we tried to get inside how each policy alternative was supposed to work by asking several questions. Following up on each of those questions, you can build (or apply) a model that will help you predict the outcomes that would result from implementing the policy.

i. who will take action?

Here you might draw on bureaucratic politics models, or simply your experience with attempts by similar actors to implement similar tasks to project the impact of future actions.

ii. what will motivate the actors?

Again, you could draw on psychology—or common sense—to project how key participants will react to different incentives or benefits.

iii. who will enjoy the benefits or bear the costs of the policy?

Here, if you assume utility-maximizing behavior, you should be able to project how different stakeholders will respond based on what they will get out of the new policy.

Whatever projection methods you use, it may be helpful to try to attach *magnitudes* to your estimates, even if you wish to use ranges instead of point estimates. It's especially useful to try to frame estimates in terms of *break-even points*: at what point will the predicted outcome cover expected costs or reach some minimal acceptable effectiveness? Even if estimated outcomes remain quite uncertain, it may be possible to make decisions if the outcomes will pass a given break-even point.

b) Create Scenarios

Once you have sketched in the first version of your outcomes matrix, you may wish to test its realism by imagining scenarios that would allow the outcomes to work well or cause the implementation to fail. To craft a good scenario, write the story of what happened to the policy alternative once it was accepted and implemented.

- Your scenario could take the form of an *imaginary assessment* carried out several years after the policy was put in place. It may help to imagine one or more things that might go wrong—delays, administrative costs, “capture” by unintended beneficiaries, scandal from fraud or abuse—and work out how each would affect projected outcomes.
- Another technique is to imagine that you were in the shoes of each of the key actors or stakeholders who are involved or affected by the proposed policy alternative and ask yourself, what will I do if this policy comes into force? How will I react? Then imagine how other actors will adapt to other people’s reactions to the policy. Note that you may find that the result can be mutually supportive adaptations that allow a policy alternative to have better than expected outcomes.

Now that you have projected the outcomes for alternative solution you may wish to reconsider some of the earlier steps in your analysis. In particular, you may wish to invent new solutions, or modify one of your existing solutions, and project outcomes for the new variant. At the same time, you may wish to reconsider, once again, the definition of your problem, or reassess the criteria you use to judge success.

Fifth Step: Analyze Trade-Offs between Outcomes

In the fifth step, you need to analyze the trade-offs between the outcomes projected for each of the alternative solutions. One key thing to remember here is that you need to compare projected outcomes—not policy options.

a) Cost versus benefits:

Most of the time, you will simply estimate the probability of success and balance that against the likely costs and risks.

b) Optimization under Constraint:

Sometimes, you may need to pick options that do not violate a certain constraint—legal, political, moral, or budgetary. In this case, you simply pick the best option after you have eliminated those that break too much china.

c) Comparing mixed outcomes:

If the outcome projected for one policy alternative is clearly better on all criteria, it's simple to pick the best solution. But if the different alternatives are projected to generated mixed outcomes, you need to come up with a way to compare them.

- Note that the sample outcomes matrix that I have provided with this module represents a complicated case.
- Try prices: In some cases, it may be possible to put a price tag on different outcomes, such as the property damage that might occur from a natural or manmade disaster.
- Use a Baseline: Another approach is to consider the projected outcomes from one of the policy options (such as continuing present actions with no change) as a baseline case against which to compare the expected outcomes from other cases. This might involve constructing another outcomes matrix that compares each policy option's outcome against the outcome for the baseline case.

Whatever the trade-offs, your job is to simplify and clarify them for the benefit of whoever needs to make a decision. You can do this by eliminating options that are clearly weaker than others.

Sixth Step: Choose the Best Solution

In the sixth step, you should try to choose the best solution. You should take this step even if it is not appropriate to come out in favor of one alternative in your final report because it is a way to test how well you have analyzed the problem.

- You should put yourself in the place of the decision-maker and try to choose a policy option on the basis of your analysis. If you find the decision is difficult, perhaps you need to do more work on your analysis.
- If you can't convince yourself that your analysis has provided grounds for a reasonable decision, how do you expect to convince anyone else?

Fine Tuning

Any shortcomings you may find in your analysis may be easy to correct. For example, you may simply need to do more work to quantify projected outcomes (or strengthen your confidence in your estimates). This might inspire you to refine the models you have used to make these projections. Or you may need to reconsider the importance of various criteria—possibly in consultation with other interested parties. Again, you may wish to revisit the language and concepts used to define the problem.

This would also be an obvious time to ask friends or other interested parties to check your analysis. If relatively neutral outsiders find your analysis compelling, that would be a good sign. If, however, they find the work you have done simply unclear, that indicates that it needs further refinements.

Seventh Step: Explain Your Recommendation

In the seventh step, you need to explain your recommendations and tell people how you arrived at them.

- This stage will probably only come after you have repeated the previous six steps more than once.
- At some point you need to tell your story to some audience: a client, your agency, a community of people concerned with a particular policy.

As with all writing, it's a good idea to sketch out drafts as you go along—although you may have to throw some away, the rest will be helpful.

Balance Rigor and Clarity

There are two things to consider that point in two different directions.

- You want to present your analysis in a rigorous form that will stand up to challenges from other policy analysts or decision-makers who may be pursuing different agendas.
- You need to explain your ideas in a form that is clear and simple and appropriate for different audiences.

Report Outline

A good outline for a report that analyzes policy options would begin with the definition of the problem and the criteria used to judge alternatives. Separate sections would then treat each policy alternative. These sections would project the expected outcome(s) for that alternative and explain how likely the outcome(s) would be in terms of some causal model. At the end would come another section that discusses the trade-offs between the projected outcomes for the policy options. The conclusion might recommend a particular option, discuss implementation, and highlight remaining questions or issues.

Note that this type of report would *not* follow the seven-step process. Instead, it would present the results in an analytical format that could, in fact, be summarized in a couple of matrices.

Trial Audiences

Once you've sketched out your report, try it out on sample audiences.

- To make sure it's clear and compelling, try it out on tough audiences—like teenagers.
- To eliminate jargon, try it out on intelligent lay persons.
- To test the rigor of your reasoning, try it out with critics.

Part III: Conclusion: Taking Responsibility for Public Choice

Policy Options Analysis represents a double challenge: to clarify the stakes in public choices in terms of community goals, which ultimately derive from our values, and in terms of costs and benefits, which we may be able to measure in a rigorous, objective manner.

Policy Options Analysis is based on the humanistic claim that instead of ducking hard decisions, it's worthwhile for us—as a family, as a team, as a company, as a community, as a nation—to take the time to know ourselves better, to define what we value, to *take responsibility* for public choices that will shape our future.

Thus Policy Options Analysis expresses the modern view that enlightened experts can bring sweet reason and scientific method to bear on the causes of human happiness and unhappiness. And in its more participatory, or democratic, versions, it suggests that group deliberation may improve on the visions of the solo genius.

By the same token, doing policy analysis involves accepting the risk that the results will be used to support actions that turn out to have bad consequences. This means that the policy analyst must weigh his or her own responsibilities—and not hide behind standard answers or the “way things have always been done.” But you all know that already.