

Rational and Incremental Models of Public Policy Decision Making

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Public policymaking often involves disagreement over the best way to define problems, compare alternatives, and select action. The original essay contrasts two influential models: rational decision making and incremental decision making. Both offer useful insights, and both have limitations. The rational model imagines a structured process in which policymakers clarify goals, identify alternatives, estimate consequences, and select the option expected to produce the greatest net benefit. The incremental model, associated particularly with Charles E. Lindblom, argues that actual policymaking more often proceeds through limited comparisons and small adjustments to existing policy because decision-makers face uncertainty, time constraints, political disagreement, and incomplete information (Lindblom, 1959; Simon, 1997).

The models should not be treated as complete opposites in every respect. Rational analysis does not necessarily exclude public participation, and incrementalism does not automatically guarantee it. Either model can be centralized or participatory depending on the institution using it. Their primary difference concerns the scope of analysis and the way goals and means are handled. The rational model seeks comprehensive comparison against clearly defined objectives, while incrementalism accepts that objectives are contested and that policymakers often compare only a limited set of feasible changes. A strong public-policy process may use elements of both.

The Rational Decision-Making Model

The rational model begins from the idea that public decisions should be connected to explicit goals and supported by systematic evidence. Policymakers define the problem, identify the values at stake, develop possible solutions, estimate costs and benefits, and choose the alternative that performs best according to agreed criteria. The original essay lists four steps: defining goals, identifying alternatives, assessing potential outcomes, and selecting the most feasible option. These remain the model's basic logic, although many formulations add implementation, monitoring, and evaluation.

Rationality in this context does not mean that decision-makers are emotionally detached or morally neutral. It means that reasons are made explicit and that alternatives are judged consistently. Public values such as equity, liberty, safety, environmental protection, and administrative feasibility can be included alongside economic efficiency. The challenge is that these values may conflict and cannot always be converted into one common measurement.

Defining the Policy Problem

A rational analysis depends heavily on the way the problem is defined. If traffic congestion is defined only as insufficient road capacity, the alternatives will focus on road construction. If it is defined as excessive dependence on private vehicles, the analysis may consider transit, land use, pricing, remote work, and walking infrastructure. Problem definition is therefore not a neutral preliminary step; it shapes the entire decision.

Policymakers should distinguish symptoms from causes and identify which populations experience the problem. Data can reveal patterns, but affected communities often provide information that administrative records miss. Public participation can therefore strengthen rational analysis rather than contradict it. The original claim that the rational model necessarily denies community involvement is too broad.

Goals and Social Values

The comprehensive rational model often assumes that goals can be specified clearly and ordered according to priority. In practice, public institutions serve multiple stakeholders. A climate policy may seek emissions reduction, affordability, employment, energy security, and justice. Agreement on one goal does not establish how to balance the others. Political conflict is partly conflict over values, not merely incomplete calculation.

Goals can also be vague. Terms such as “improve safety” or “support growth” require measurable definitions. Indicators should be chosen carefully because they can narrow the policy. Measuring police performance only through arrests, for example, can encourage activity that does not improve public trust or safety. Rational analysis is strongest when it recognizes that measurement is itself a value choice.

Identifying Alternatives

The model asks policymakers to identify a broad range of alternatives rather than comparing a preferred proposal only with doing nothing. Alternatives may include regulation, taxation, public spending, information, direct service, market incentives, partnerships, or changes to institutional design. They may also be combined into policy packages.

Generating alternatives requires creativity and knowledge. Agencies may rely on familiar tools because they possess established procedures and professional expertise. Independent research, pilot programs, international comparison, and stakeholder input can expand the set. A decision cannot be fully rational when the most promising alternative was never considered.

Forecasting Consequences

Forecasting estimates what each alternative will produce. Tools include cost-benefit analysis, cost-effectiveness analysis, risk assessment, economic modeling, environmental assessment, and scenario planning. These methods organize evidence, but every forecast contains assumptions. People may change behavior after policy adoption, markets may respond unexpectedly, and implementation may vary among regions or agencies (Stone, 2012).

Uncertainty should be reported rather than concealed behind a single number. Sensitivity analysis shows how conclusions change when assumptions vary. Distributional analysis asks who receives benefits and who bears costs. A proposal with positive total net benefit may still impose severe harm on a small community. Rational analysis should therefore examine rights and fairness rather than relying only on aggregate efficiency.

Choosing the Preferred Alternative

The original essay describes selecting the most feasible option after comparing outcomes. Feasibility includes legal authority, budget, administrative capacity, political support, technology, and public acceptance. The theoretically most beneficial policy may fail when institutions cannot implement it. However, feasibility should not be used merely to preserve existing power. Political resistance can change through leadership, public education, coalition building, or phased implementation.

Decision criteria should be stated before final selection where possible. Otherwise, policymakers may adjust criteria to justify a favored choice. Transparency allows the public to see why one alternative was selected and which trade-offs were accepted.

Strengths of the Rational Model

The rational model encourages clarity, evidence, comparison, and accountability. It reduces the risk that policy will be based entirely on habit, pressure, or intuition. It can expose hidden costs, identify efficient alternatives, and create a record of the reasoning behind a decision. In areas involving engineering, budgeting, health, or environmental risk, systematic analysis is essential.

The model also provides a normative standard. Even when complete rationality is impossible, asking what information would be needed and which alternatives were omitted can improve practice. It reminds policymakers that public decisions should be justified through reasons rather than authority alone.

Limitations of the Rational Model

Herbert Simon's concept of bounded rationality explains that decision-makers possess limited information, time, attention, and computational capacity. They cannot evaluate every possible alternative and consequence. Public problems are often uncertain and interconnected, while preferences change during debate. The comprehensive model can therefore create an unrealistic picture of a decision-maker standing outside politics with complete knowledge (Simon, 1997).

Analysis can also be expensive and slow. During an emergency, waiting for perfect evidence may produce greater harm. Technical models may give power to experts while excluding citizens whose values cannot be represented easily in calculations. The danger is not rationality itself but the claim that a contested political choice has become purely technical.

The Incremental Model

Charles Lindblom described policymaking as "successive limited comparisons" and famously called it "the science of muddling through." Incremental decision-makers begin from existing policy and compare a small number of changes that differ by degree rather than by fundamental design. Goals and means are considered together because political actors may agree on a practical step even when they disagree about ultimate objectives (Lindblom, 1959; Lindblom, 1979).

The original essay correctly notes that incrementalism responds to limited time and resources. It also recognizes that policy is fragmented and revised through repeated steps. However, "purist" and "pruritic" are not appropriate descriptions; the model is pluralistic and practical rather than pure. Lindblom argued that mutual adjustment among actors can produce workable policy without one authority possessing comprehensive knowledge.

Ends and Means in Incrementalism

In comprehensive rationality, goals are defined before means. Incrementalism observes that policymakers often discover what they value while considering feasible options. A city may agree to increase bus frequency without resolving every disagreement about transport, climate, or urban equality. The specific proposal makes values concrete.

This interdependence of ends and means can support compromise. It can also limit imagination because existing arrangements define what appears feasible. Radical alternatives may be excluded before evaluation. Incrementalism explains much policymaking but does not always justify it morally.

Limited Comparison

Incremental analysis compares alternatives close to the status quo. This reduces information demands and makes consequences easier to estimate because changes are smaller. Agencies can learn from implementation and revise later. Pilot programs and phased reforms reflect this logic.

Small steps are especially useful when uncertainty is high and error can be corrected. They are less suitable when delay produces irreversible harm or when the existing policy is fundamentally unjust. Gradual reform of a discriminatory institution may preserve injury that requires immediate action.

Political Bargaining and Participation

The original essay associates incrementalism with community involvement. Lindblom's pluralist account emphasizes interaction among officials, interest groups, experts, and organizations. No actor controls every dimension, and policy emerges through bargaining and adjustment. This can distribute influence and reveal practical knowledge.

Pluralism does not guarantee equality. Wealthy organizations may possess greater access, staff, information, and campaign resources than marginalized communities. Incremental bargaining can therefore reproduce unequal power. Participation must be designed actively through transparency, accessible meetings, consultation, representation, and protection for less powerful voices.

Strengths of Incrementalism

Incrementalism is realistic about uncertainty and institutional limits. It lowers the cost of analysis, supports compromise, and allows learning. Small changes may be easier to reverse if they fail. By building on familiar systems, they can reduce implementation resistance and administrative disruption.

The model also recognizes that policy stability has value. Constant complete redesign can create confusion and undermine trust. Incremental adjustment preserves functioning elements while addressing specific problems. Many budgets, regulations, and programs evolve this way because legislatures and agencies revise previous decisions rather than beginning from zero each year.

Limitations of Incrementalism

The principal limitation is conservatism. Beginning from the status quo gives existing institutions and beneficiaries an advantage. Policies created through historical exclusion may remain largely intact because only small changes are considered. Problems such as climate change, systemic

discrimination, public-health emergencies, or institutional collapse may require transformation rather than adjustment.

Incrementalism can also produce incoherent policy when many small compromises accumulate without a clear direction. Short-term political agreement may postpone necessary investment. Learning requires evaluation, but governments sometimes continue programs without determining whether previous steps worked.

Interchangeability and Efficiency

The original essay refers to “interchangeable efficiency,” apparently meaning the rational assumption that values and consequences can be compared or traded. Cost-benefit analysis may assign monetary values to time, risk, environment, and other outcomes in order to compare alternatives. Such comparison can clarify trade-offs, but not every value should be treated as fully exchangeable. Basic rights, cultural heritage, and irreversible ecological loss may require constraints rather than simple compensation.

Incrementalism avoids some large-scale valuation by comparing nearby options, but it still makes trade-offs. A small budget increase for one program may mean less funding elsewhere. Both models therefore require ethical judgment about what may be exchanged and what must be protected.

When Rational Analysis Is Most Useful

Rational analysis is especially useful when goals are relatively clear, data are available, alternatives can be modeled, and the decision has major long-term consequences. Infrastructure planning, vaccination strategy, environmental standards, and public investment benefit from systematic comparison. Large decisions should not be made merely because they resemble last year’s choice.

Even in these cases, analysis should include public values and implementation knowledge. A technically efficient hospital location may be inaccessible to communities without transport. Rationality must be connected to lived conditions.

When Incrementalism Is Most Useful

Incrementalism is valuable when uncertainty is high, institutions need to learn, political agreement is limited, and mistakes can be corrected. A new service may begin as a pilot, gather evidence, and expand gradually. Regulations may be adjusted as technology changes. Budgeting often requires incremental decisions because complete program evaluation every year is impractical.

The key is to specify review points. Without deadlines and measures, “temporary” incremental steps

can become permanent stagnation. Policymakers should identify what evidence would justify expansion, modification, or termination.

Combining the Models

Many successful processes combine broad rational direction with incremental implementation. A government may establish a long-term emissions target through scientific and ethical analysis, then use phased regulations, pilot programs, and periodic revision to reach it. A health system may define the goal of universal access while testing different delivery methods locally.

This approach preserves ambition without pretending that every implementation detail is known. Strategic goals prevent small steps from drifting, while incremental feedback prevents the strategy from becoming rigid. Participation can occur during both goal setting and practical adjustment.

Example: Urban Transport Policy

A rational transport plan might define objectives involving travel time, emissions, safety, affordability, and access, then compare highways, rail, bus rapid transit, pricing, cycling, and land-use change. An incremental approach might add one bus corridor, test parking prices, or redesign selected intersections. Each supplies information the other needs.

If the city uses only comprehensive analysis, planning may continue for years without visible improvement. If it uses only small projects, the network may remain fragmented. A combined model establishes a system-level direction and learns through staged action.

Evaluation and Policy Learning

Neither model is complete without evaluation. Rational models depend on forecasts that should be compared with results. Incremental models depend on learning, which cannot occur when outcomes are not measured. Evaluation should examine effectiveness, cost, equity, implementation, and unintended consequences.

Policy failure should not automatically lead to abandonment. The theory may be wrong, implementation may be weak, or conditions may have changed. Transparent evaluation helps distinguish these explanations and supports revision.

Conclusion

The rational and incremental models provide different ways of understanding public decision making.

Rational analysis defines goals, develops alternatives, forecasts consequences, and selects according to explicit criteria. Its strengths are systematic comparison and accountability, while its limitations include unrealistic information demands and the risk of technocratic exclusion. Incrementalism compares limited changes to existing policy, supports compromise, and allows learning. Its strengths are feasibility and adaptability, while its limitations include conservatism, unequal bargaining, and drift.

The original essay correctly concludes that each model has a role. It should not claim that rationality inherently excludes the community or that incrementalism automatically includes it. Participation and power depend on institutional design. In practice, policymakers can combine rational strategic direction with incremental implementation and evaluation. The best model is not selected in the abstract; it depends on the urgency, uncertainty, reversibility, ethical stakes, and capacity surrounding the policy problem.

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