

PRINCIPLES: What should we expect in New Jersey's next school finance formula?

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1. EXECUTIVE SUMMARY

New Jersey develops its school finance formulas the wrong way. The formula development process itself is the cause of great inefficiency and high cost in education.

- No one knows why some New Jersey school districts spend twice the money as others without obtaining better performance. And conversely, no one knows why some get twice the performance without spending more money. The state does not collect enough data to determine which educational programs and practices work.
- Parts of the formulas come from coarse approximations and guesswork. Not enough care is taken with details. The result is wasteful, uneven impact, on both taxpayers and school districts.
- Some formula parameters are set directly by the state legislature, resulting in a rigid, ill-fitting system that shortchanges many school districts.
- No channel for remedy is provided, other than litigation. The resulting lawsuits challenging New Jersey's school finance formulas have cost huge sums of money. The lack of remedy has delayed educational progress many years.
- Short-term expedients have trumped long-term savings. Some spending cuts end up costing more than they save.
- No systematic approach to incentives is in place. School districts find that some of their successes are punished, and failures rewarded.

New Jersey's current system for developing school finance formulas does have some benefits:

- Lower short-term costs in data collection, analysis, and research.
- Less work for overburdened legislators and staff.
- More opportunity for subjective control over funding decisions.

However, our state is now in dire financial trouble. For example, New Jersey's retirement pension/health obligation alone exceeds twice the state government's entire annual income.

In these circumstances, the disadvantages of the state's current system for developing school finance formulas outweigh the benefits.

Instead, the state legislature should take steps for improvement, including:

- Greatly strengthen the state's infrastructure for educational data collection, analysis, and research.

This is an interactive document. Readers are invited to post questions, comments, and criticism at www.ValueNJ.org. Posts, responses, and future updates to the document will be publicly available.

This is intended for members of the public, elected officials, legislative and executive staff, educators, parents – anyone interested in New Jersey's schools and taxes.

Please also email this document widely within your own community, and to colleagues and friends in other communities in New Jersey.

- Create and rely on an accurate, comprehensive model of school spending, based on all of New Jersey’s public schools, and including data on educational programs and outcomes.
- Use more details and more care to design formulas that *spread financial impact* as evenly as possible, both for taxpayers progressively by wealth and for school districts by need.
- Adjust the formulas and other rules to give schools incentives both for improvements *and* for ongoing successes.
- Shift most of the details of selecting and refining model parameters to an administrative process. Allow the process to grant any district’s requested remedial changes to model parameters, meeting certain objective qualifications, and applicable uniformly to all districts.
- Use the model to expose publicly the tradeoffs between expected short-term and long-term savings for proposed changes in any school district’s budget. The information will help the public and officials to make rational decisions.

How much of New Jersey’s \$18 billion annual spending on public schools can be saved by following the recommendations in this document, either in dollars or in educational improvement? Based on comparison with other proposed reforms, like district regional consolidation, the estimated savings proposed here is in the low 10-figure range: around **\$1 billion annually**, in order of magnitude.

ACKNOWLEDGEMENTS

I solicited comments and criticism on two prior drafts. The written responses, both favorable and critical, are listed (anonymized) on www.ValueNJ.org. Respondents included education advocacy group leaders and activists, parents, university professors, lawyers, business group leaders, tax-responsibility activists, senior citizen activists, Parent-Teacher Association leaders, elected Board of Education officials, and school district superintendents.

I’m deeply grateful for the time, interest, and honest criticism from those who read the drafts. Their input led to a vastly improved document. Responsibility for the content, and especially for errors, are mine alone.

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2. INTRODUCTION: FAILED FORMULAS

BACKGROUND

Despite repeated attempts by the state legislature over the past 35–40 years, New Jersey’s school finance formulas haven’t stuck. Courts have overturned their key components.

New Jersey has been without a school finance formula since 2002, when the CEIFA formula became inoperative, as a result of court rulings. State officials are now redesigning the school finance laws and formulas. It’s a challenging task, because of all the constraints and fractious interests that must be balanced.

Having failed to establish a formula for the 2007-08 school year, the New Jersey Department of Education, the state legislature, and the Governor’s staff are now aiming for 2008-09. The vote enacting a new formula needs to be taken either in November/December 2007 by the post-election lame duck legislature, or in January/February 2008 by the new legislature.

New Jersey is now deeper in debt than ever before. To support any plan for climbing out of the state’s financial crisis, the public must gain *confidence* that the legislature and executive branch have adopted new, responsible ways to prevent financial mistakes like those of the past. Now is the legislature’s chance to do better, by reforming its own decision-making and policy-making practices.

ACCURATE FORMULAS SAVE MONEY

This document explains a paradigm, “model to understand,” which systematically develops efficiency through measurement, accurate modeling, aligned incentives, and sharing of identified best practices. New Jersey should start examining implementation of accurate formulas, which spread impact more evenly, as a potential **major lode** of funding for education.

3. THOROUGH AND EFFICIENT

“The Legislature shall provide for the maintenance and support of a **thorough and efficient** system of free public schools for the instruction of all the children in the State between the ages of five and eighteen years.”
–*New Jersey Constitution*

SEVERAL MAJOR SOURCES OF INEFFICIENCY in New Jersey’s school finance have *not* been adequately targeted, or even identified and debated. This document describes them and proposes constructive strategies both to ease the financial crunch and to improve education – in other words, to educate more thoroughly and efficiently. They are:

- **Lack of data.** New Jersey still lacks technology to collect sufficient data about teaching and learning performance. Until now, it couldn’t even record or track individual students’ performance from year to year. As a result, the state has little ability to identify and spread programs and practices that work. Money is spent on less-effective programs.
- **Oversimplification.** Every Spring after receiving the Governor’s budget proposal, the legislature allocates school funding, in haste for the new fiscal year. It often sets oversimplified rules which sloppily leave taxpayer money on the table. One example is blanket caps on district spending growth: unintentionally lenient on districts with shrinking enrollment.
- **Political jockeying among localities.** New Jersey’s constitution and tradition are more “locality-centric” than those of most other states. Our legislative structure aligns with the interests of “forty fiefs feuding” (our 40 legislative districts) rather than the interests of the state as a whole. In New Jersey school finance, there is a large and persistent cost of politics.

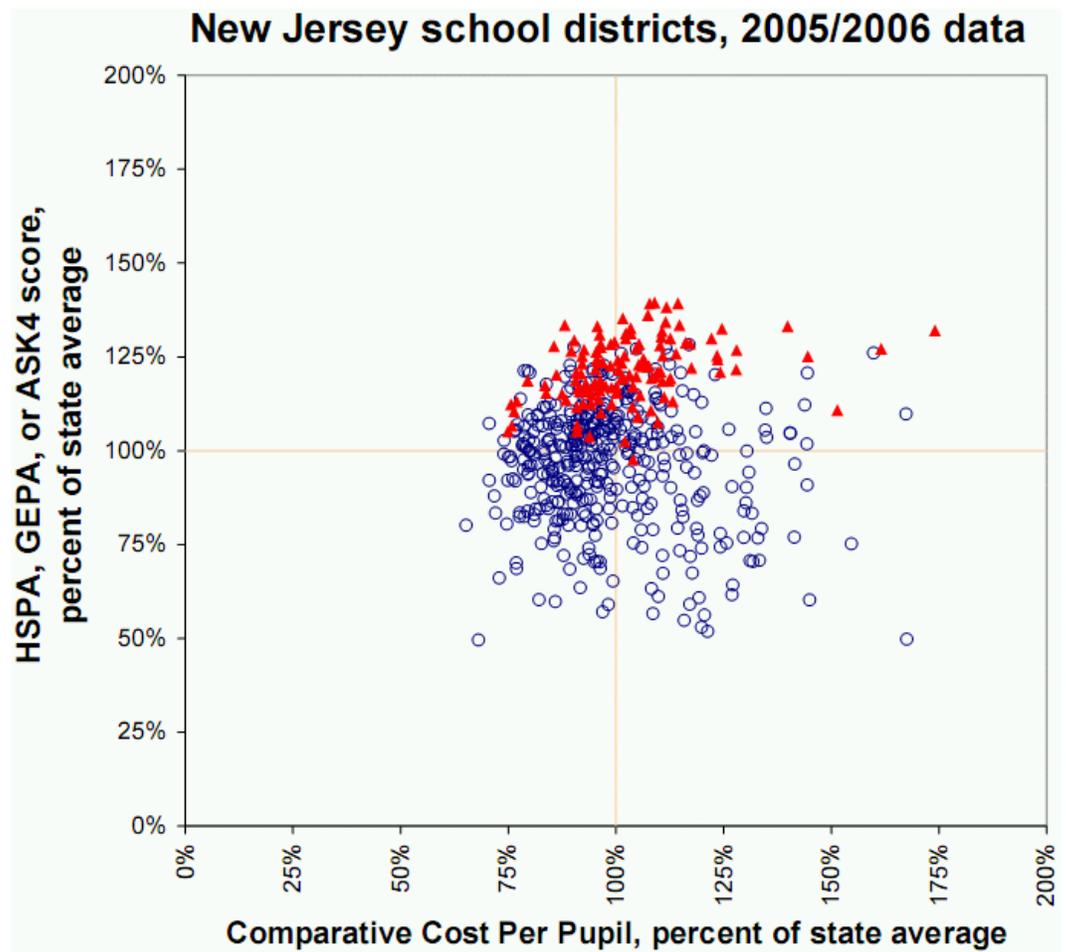
- **Litigation.** Inequitable and inadequate funding of schools in New Jersey has led to nearly 40 years of lawsuits, resulting in huge legal bills, multi-year delays in education programs, judicial invalidation of formulas, disruption of fair funding of all districts, and attention diverted to dollars rather than education.
- **Uneven impact on taxpayers.** Surprisingly, New Jersey's overall taxation is moderate, not high, compared to other states, when incomes and all taxes (state+local) are considered. The bigger problem here is the distribution of tax load.
- **Uneven impact on school districts.** Some school districts receive more state aid dollars than others, relative to what they need. State aid is not allocated to maximize effectiveness.

How much of New Jersey's approximately \$18 billion annual school spending is wasted by these problems? To what extent would fixing them cure the educational inadequacy in many districts?

Although there's no exact answer, one can legitimately speculate that the total dollar amount easily exceeds \$1 billion annually. (In comparison, the potential savings from regionally consolidating school districts has been estimated at less than 2% of total school spending, not counting the costs of organizational disruption or of dissatisfaction from loss of home rule.)

4. VARIATIONS IN SPENDING AND PERFORMANCE

NEW JERSEY IS FLYING BLIND (or nearly blind) in school finance. The graph below shows the huge variation in spending from district to district (about 65–175% of the mean cost per pupil). It also shows the huge variation in district student performance (50–140% of the mean score on standardized tests).



NJ Dept of Education data. Analysis courtesy of N. Harrington, Long Hill Twp.

Data like these should be used with caution. Standardized test scores are notoriously inaccurate measures of performance. And New Jersey's published cost figures are only partially adjusted for each district's external circumstances and characteristics. Nevertheless, these crude data are the only current published figures spanning all New Jersey school districts.

The data reveal little correlation between spending and scores. In the wealthiest districts (categories I and J in the state's district factor group scale, marked as ▲), the range of spending is as wide as in the other districts. Yet almost no correlation is evident between I-J spending and scores.

Why do some districts spend more than others? Why do some perform better than others? How can money be applied effectively to improve performance? New Jersey has no credible account.

A major reason for this blindness is lack of data and ineffective data analysis. Historically, New Jersey has underfunded its data collection and analysis infrastructure. In tight budgets, it's easier to spend on direct education than on support.

A consequence is that no one knows why some districts spend twice the money as others without obtaining better performance. And conversely, no one knows why some get twice the performance without spending more money. This lack of knowledge is disastrous for school finance and makes it impossible to develop an efficient finance formula.

"Administrative" cuts to save money have led to unforeseen results: uneven impact on school quality, uneven impact on taxpayers, and lack of knowledge on how to improve education. Any enterprise that spends \$18 billion annually, like New Jersey's public school system, should budget well into 9 figures for research, data collection, and analysis.

The NJ SMART data collection program is a small, late step in the right direction. In 2007 its main accomplishment will be to assign an ID number for every student in the state. Test scores back to 1999 have been entered into its database, and future scores will be entered.

5. THE FOUR COSTS OF UNEVEN IMPACT

UNEVEN IMPACT is a major problem with New Jersey's school finance formulas. It is a phenomenon that hits both taxpayers and school districts.

On the revenue side, some taxpayers are charged more than others, relative to what they can afford. This costs money in two ways:

1. If the formula charges some taxpayers less than their fair share, the difference is lost revenue.
2. If it overcharges some taxpayers, their legitimate complaints bias legislators to reduce tax rates for *all*.

And on the expense side, some school districts receive more money than others, relative to what they need. This also costs money in two ways:

3. If the formula gives a district more than it actually needs, the excess is wasteful.
4. Legitimate complaints from underfunded districts bias legislators to increase funding for *all*.

The dollar amounts in question are large. Because the data that New Jersey has gathered cannot connect educational spending, programs, and practices to the resulting *individual* student outcomes, no one knows clearly how to efficiently improve outcomes. Lack of data means lack of understanding, which then means lack of control.

By spreading impact more evenly, New Jersey can substantially reduce the number of taxpayers whose legitimate "scream threshold" is exceeded. Redistributing the tax burden more wisely, using a more accurate model of affordability, will increase state tax revenue, while relieving the burden on those who legitimately feel overtaxed.

Likewise, by spreading impact more evenly, New Jersey can allocate its funding to school districts more effectively according to standards of fairness and need.

New Jersey isn't going to cure its deep problems right away. But the concepts in this document might help it gain a few years of breathing room, and get us to a more successful and stable system of school finance based on *gaining better understanding of what works* in education.

6. FINANCE FORMULA DESIGN PRINCIPLES

SCHOOL FINANCE actually comprises *four* formulas, not just one:

1. **Spending** – cost per child, in each school district.
2. **Funding** – who pays? State government, municipalities, or other sources.
3. **Tax** – how much from property taxes, income taxes, sales taxes, etc.?
4. **Accountability** – measure how programs, practices, and funds affect educational outcomes.

These four formulas are critically important. A flaw in any one of them could waste huge sums of money, and deprive New Jersey's children of needed educational resources.

THIS DOCUMENT PROPOSES “DESIGN PRINCIPLES” for New Jersey's school finance formulas. To give residents confidence, any formulas should be developed and evaluated using stated principles.

This document is concerned with formula quality – not educational policy *per se*. It expresses nonpartisan views of citizens wanting New Jersey to improve the adequacy, fairness, and financial wisdom of its school funding. The purpose is not to seek advantage for one group over another.

7. PRINCIPLES OF CREDIBILITY

A credible school funding formula must use sound, understandable math and statistics.

MODEL TO UNDERSTAND

CREATE A SINGLE, ACCURATE MODEL of current spending in all of New Jersey's public school districts. New Jersey has no such model. Its models are piecemeal, coarse, and inaccurate; they have led to wasteful, inefficient legislation.

A spending model is typically a spreadsheet that breaks spending into **dimensions** of cost, each with a dollar **weight**. Each school district has its own individual set of **characteristics** which describe the district on each dimension. Models can be **coarse** (with few dimensions) or **detailed** (with many).

What is a “model”? The Kelley Blue Book is a well known example: a model for pricing used cars. Over the years, Kelley has refined its list of the significant **dimensions** that contribute to a car's value – make, model, year, mileage, condition, features, location, etc. Kelley uses car sale data to derive and continually update its numerical **weights** that indicate how many dollars each dimension contributes to total car price. The price for any given car can be **predicted** by applying the model to the car's individual **characteristics** on each of the dimensions.

New Jersey schools have great variety in their spending patterns. Without a single, unified, accurate model that spans this diversity, no one can determine which practices and spending priorities lead to success, and spread the successful practices. The best models would be derived from data on all of New Jersey's school districts, not just one or a few.

A school spending model is judged by how **accurately** it **predicts** districts' actual spending. Appendix A illustrates how to evaluate the accuracy of a hypothetical model. Even if there are many dimensions, each

dimension is incorporated in the same, simple way: a single dollar weight multiplied by the single characteristic value for each district.

The model can thus incorporate many dimensions, yet remain understandable. In this manner, any accurate model of school spending should be detailed but *structurally simple*.

“Detail” is different from complexity. A model can (and should) be detailed, for accuracy. Each detail (dimension) should be understandable independently from other details, and there should be a structurally simple, uniform way in which details are combined into the model.

In contrast, complexity should be avoided. A complex model might, for example, incorporate each dimension in a different way, without much consistency in whether they are added, multiplied, etc. Or a complex model might use arbitrary, unreasonable dimensions, like the product of the number of teachers and school building age. Complexity impedes understanding.

“Accuracy” differs from fairness and equity. An accurate model is one that reflects reality. If a spending model’s predictions closely correspond to actual spending, then the model can be considered accurate, and it is useful as a tool for understanding.

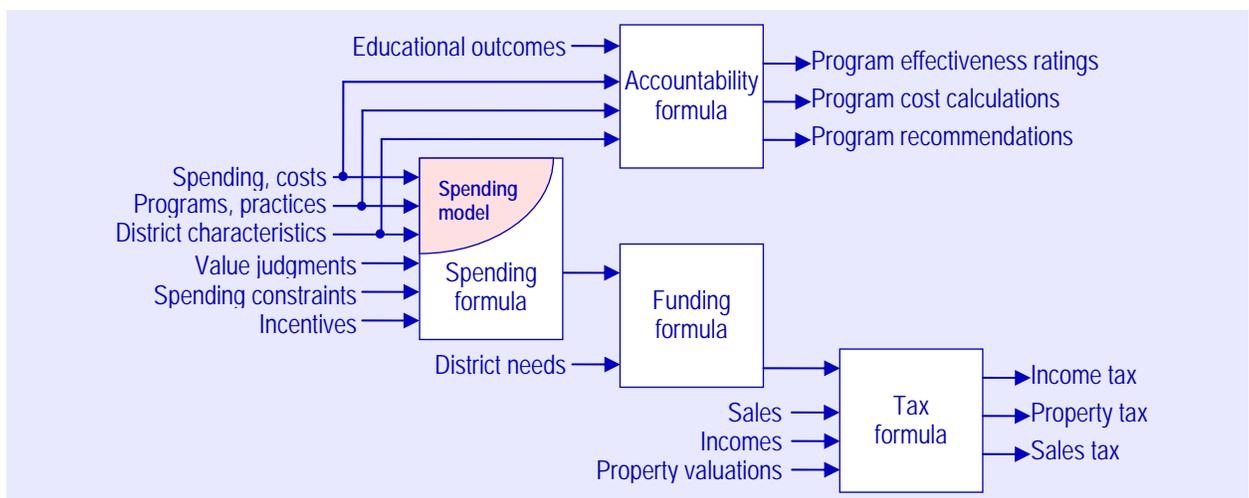
No school finance model will ever be completely accurate. But the benefit of any proposed change to a model (e.g., adding a dimension, or changing some weights) can be determined by examining whether the change improves the model’s predictions.

Models differ from formulas. A model is *descriptive*; it is a numerical summary or picture of what is actually happening. A school spending model will help us *understand* the costs of education, by characterizing how each district spends its budget.

A formula, on the other hand, is *prescriptive*; it specifies a result. A school funding formula determines how much money the state will contribute to each district’s budget.

Every formula implicitly includes a model, but goes beyond the model by adding *judgments* of desirability or undesirability. The formula is where the legislature sets support, incentives, caps, controls, etc., to push toward goals of educational quality and financial efficiency.

For example, a model might show that a district is spending \$8,100 per student; but a formula might stipulate that no district *should* spend less than \$8,800, and would allocate funds accordingly.



An **accurate formula** is a formula that targets its prescriptions and measures accomplishment of its aims on the basis of an accurate model.

A single spending model is essential because it would let us factor out the differences among districts, discover what they have in common, learn or generalize across districts, and then adjust for each district’s unique

circumstances. New Jersey must learn what is unique and what is common among school districts, well enough to spread financial impact more evenly.

MODEL COMPREHENSIVELY. Models should include *all* significant dimensions – not just the number of students, teachers, and buildings. For example, they should include:

- seniority/experience of teachers
- heating/cooling/maintenance
- special education and services
- English or other native language
- transportation busing/walking safety
- enrollment growth
- parity aid across districts
- educational outcomes per student
- in-district vs outplaced special education
- parent involvement programs
- nutritional, health, social services
- after-school/summer instruction
- exemplary/motivation/pride programs
- support and counseling programs
- age/condition/efficiency of buildings
- facilities construction needs
- wealth/poverty – local tax levy
- teacher training and development
- in-state variations in costs of living/work
- security – safety from crime, drugs
- curriculum changes
- educational programs in each grade
- supplemental literacy/reading
- stakeholder participation programs
- technology access/effectiveness
- athletics, recreation, extracurriculars
- anti-drug/dropout/pregnancy/violence
- preschool and full-day kindergarten

Some might argue that developing a comprehensive model would be too hard or too costly. It's true that significant effort and cost are involved. But the payback achievable is far greater.

Clearly, a comprehensive, detailed model should omit insignificant dimensions – where the cost or inaccuracy of data collection outweigh the benefits of fair and adequate funding.

A model of anything as complex as New Jersey school finance can't be comprehensive initially. It must come with an *ongoing* mechanism of refinement, based on gathering meaningful data, analyzing and understanding real situations, and reducing guesswork. For public confidence, models must be regularly and continually refined.

IDENTIFY A SENSIBLE RATIONALE for every dimension of the model. That is, every dimension should have an easily understandable name, such as “cost of snow removal per inch of snow,” or “number of students taking Advanced Placement Math.”

(Some advanced statistical procedures come up with models in which each dimension is an indecipherable mixture of many factors. Such procedures should be avoided.)

For public confidence, the model must be detailed but understandable.

DON'T OVERSIMPLIFY DETAILS. Coarse modeling often costs extra money. Suppose a formula grants a blanket percentage budget increase to every school district. The model implicit in the formula ignores enrollment growth. The formula might be wasteful in shrinking districts – and might shortchange growing districts. A more accurate formula would incorporate enrollment details as another model dimension. *Wield a scalpel, not a machete.*

The models should be *detailed*, for accuracy, but *structurally* simple, for understandability.

“Make everything as simple as possible, but not simpler.” –Einstein

INCLUDE PARTICULARIZED NEEDS. Every school district has unique priorities and needs, to accomplish its educational mission. A school spending model must be detailed enough to express these local needs and the resulting spending. Yet the model must also do so in a way that helps us *understand* the needs and spending, by allowing apples-to-apples comparison and generalization.

A single model of school spending will contain many spending categories, to accommodate the diversity of needs and circumstances in New Jersey's school districts. Yet it must also allow the categories to be broad enough to be used by multiple districts where appropriate.

The balance between many, particularized categories versus fewer, general categories is critical for the quality of the model. The categories/dimensions in New Jersey's current system of funding are far too broad, leading to wasteful, uneven impact.

DISTINGUISH CONTROLLABLE VS. UNCONTROLLABLE FACTORS. There is a unique *hand dealt* to every district, according to its circumstances of geography, history, population, enrollment, wealth, demographics, state mandates, etc. These are the district's **uncontrollable** costs; they vary widely.

Conversely, every district makes choices – which programs to offer, which teachers to hire, how often to mow the lawn, etc. This is the *hand played* – the **controllable** costs.

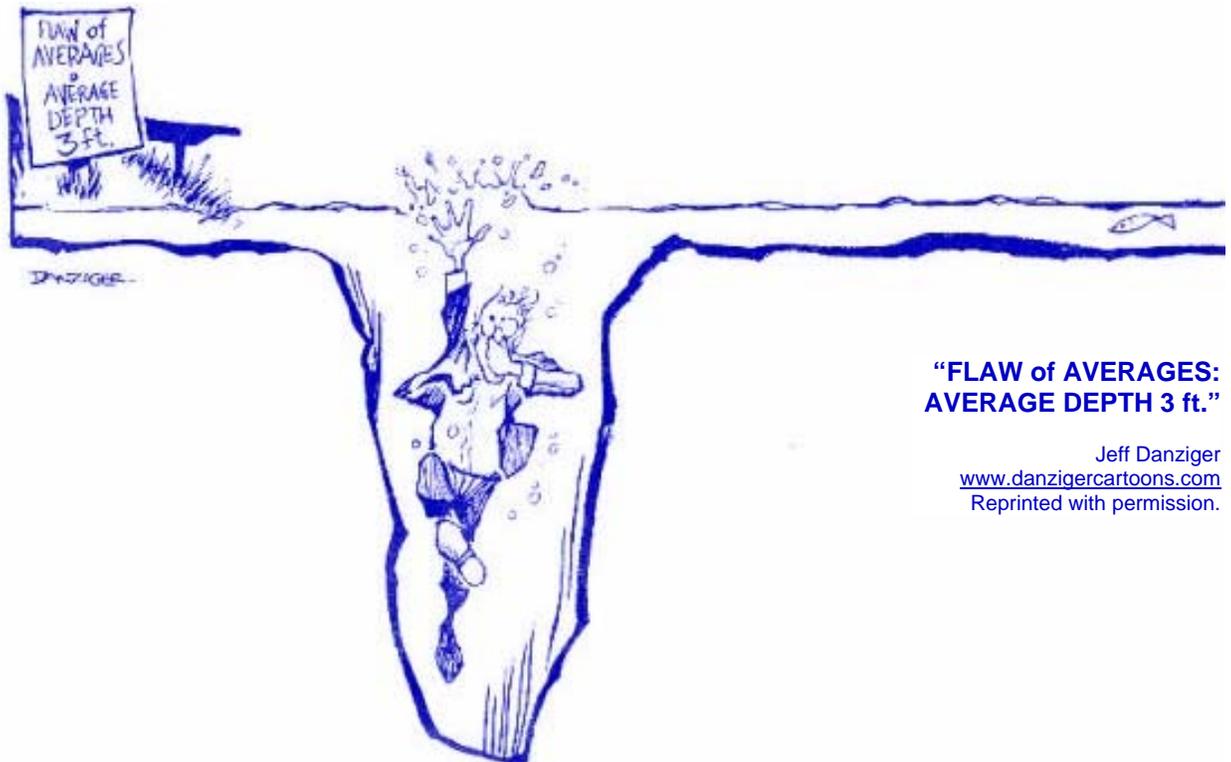
Whether to fully equalize for uncontrollable factors is a question for policy/law makers. Should a district be compensated for its mountains, to the extent that they increase transportation costs?

Whatever policy is chosen, public confidence in the formula implementing the policy demands clear, explicit distinction between controllable and uncontrollable factors.

DON'T MISUSE AVERAGES. One panel of experts says that special education services in speech should cost \$1,000 per student. Another panel says that it should cost \$3,000 per student. Does that mean that a finance formula should use the average figure of \$2,000? Of course not. The two numbers are so far apart that there must be some other explanation for the discrepancy.

Either the discrepancy must be explained, or *both* figures must be discounted. A credible model must explain, not blindly manipulate data.

Does the possibility of discrepancy between panels mean that only one panel should be consulted? Of course not. With subjective data, multiple data sources should always be used, to ensure validity. Only data on which well-chosen sources substantially agree, or which are verifiable (based on receipts, for example), should be considered valid.



**"FLAW of AVERAGES:
AVERAGE DEPTH 3 ft."**

Jeff Danziger
www.danzigercartoons.com
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A credible model uses standard statistical concepts, such as variance, significance, regression, and correlation, to identify and eliminate low-quality data – such as wildly differing data values.

TAKE THE LEAD in developing high-quality, modern statistical models for school finance. The effort for New Jersey is small, compared to the benefit in savings and revenue.

An accurate school finance model is a *prerequisite* for any formula that would provide for adequate, universal public education while controlling costs.

8. PRINCIPLES OF POLICY

To win public support, a school finance formula must make sense not only mathematically, but also in terms of education policy and financial practice.

FINANCIAL PRACTICE

ADJUST FOR REALITY. New Jersey law provides some adjustments for changing circumstances. There is an inflation adjustment, but it is based on consumer prices – which differ significantly from business prices. School finance formulas must adjust for *real* school costs, not oversimplify by using consumer costs.

Likewise, when a school district gains or loses students, the formulas must count 100% of the number of students enrolled, not an arbitrary fraction.

Special education programs required for some students are costly. Public school districts bear most of the cost, and their budgets can be greatly affected even by 1-2 such students entering or leaving. For stability and incentive alignment, state funding should accompany students moving into and out of public school districts. Districts should have no incentives to discourage enrollment, especially on the basis of special education needs, economic background, etc.

New Jersey's Supreme Court has insisted on reality. For example, in 1997 it overturned as "arbitrary" New Jersey's CEIFA school funding law, in application to the poorest ("Abbott") school districts, because the state had no studies or data justifying the dollar amounts. It required not only that the state justify the adequacy of spending levels, but also that the state "guarantee" that adequate funds are provided to school districts.

Ten years later, the state still has only rudimentary systems for measurement and data collection. New Jersey must develop the capability to measure, track, and correlate educational programs and their *individual* student outcomes.

School funding/spending should be determined by the actual, assessed needs of students – what is required for them to meet educational outcome standards. It should not be based on arbitrary indexes or spending guesses.

SPEND TO SAVE. Sometimes spending less costs more. For example, a district that cuts its maintenance budget might have to spend even more when an old pipe bursts. Likewise, a district that overcrowds its classrooms ends up paying more in special education, to remediate the resulting educational lags.

New Jersey's policies have often been short-sighted – looking ahead only to the next November election. One reason for this is the lack of accurate, public models of the tradeoffs between long-term and short-term savings. Taxpayers demand budget cuts, without realizing that some areas of decreased spending will actually cost them more money in the longer term.

In theory, one of the key reasons to finance services and infrastructure by the state (rather than corporations, etc.) is the opportunity to take advantage of long-term savings. A company cannot easily invest for a 50-year payback; but a government can.

Accurate models can help voters understand – and defend legislators – that building a school with higher-quality materials saves money if it makes the school last for 50 years instead of 25. Likewise, accurate models can explain why certain short-term administrative cuts, to areas such as data collection and analysis, lead to higher long-term costs from ineffective decision-making.

ADJUST FOR ECONOMIC CYCLES. Finance formulas should protect the legislature from “grasshopper mode” (overspending when revenues grow, and then scrambling in an economic downturn). The formulas should incorporate a long-term, “ant mode” mechanism, such as a dedicated, nonraidable fund, or anti-risk hedging, to *smooth, stabilize, and sustain* school funding across lean years.

The school finance formulas must give school districts incentives for long-term savings via *optimal* spending levels. They must model the higher expenses caused by under/overspending.

GIVE INCENTIVES TO SHARE SERVICES – in cases where sharing would save money. Break down artificial barriers to sharing, such as unequalized or uncomparable property valuations, board balance, pay differentials, and educational quality disparities. These issues can be remedied only by using models in whose accuracy the public has confidence.

TAX PROPERTY, FAIRLY. Income and property *both* are forms of wealth. Taxes shape financial decisions. If property taxes are too high, homebuying is dampened, giving people less stake in their community. But if they are too low, wealth gravitates toward property as a tax shelter, and the resulting higher tax on income discourages gainful toil and ambition. Low property taxes promote inefficient land use and sprawl.

Strike a fair balance, so that no category of wealth is immune from taxation.

Tax policies in New Jersey have driven demographic shifts – such as retiree flight. The result is an unhealthy and deepening split into two types of communities: tax-averse and family-friendly. Communities suffer a decrease in age diversity. Some aging residents feel forced to abandon their long-standing community ties, becoming socially isolated when they move.

Meanwhile, in other communities, conflict grows, as residents without school age children feel resentment over increasing taxes, and perhaps decreasing income and declining health. Some retirees are house-rich but cash-poor. Many have cash-flow trouble: difficulty paying current bills, but a windfall when they finally do sell their home.

New Jersey should implement tax policies to promote healthy, diverse communities and attract/retain residents of all ages. Such policies must consider both income and property wealth, and allow homeowners to take advantage of all their assets, including home equity, without forcing them out of their communities.

DON'T PENALIZE FRUGALITY. When school districts achieve successful educational outcomes with low spending, they should not be penalized relative to other districts.

For example, New Jersey allows each district to increase its tax levy by an annual *percentage* (4%). This system of “percentage caps” gives high-cost districts a bigger annual budgetary increase (\$600 per student than frugal districts (\$350). This is a *disincentive* for frugality – the tightest budgets get the least relief, and the biggest spenders get the most generous increase.

School finance formulas should replace percentage caps with something else: a system of incentives aligned with policy goals. The incentives should encourage improvement in educational outcomes and should not penalize spending restraint.

A simple solution, aligned with the goal of frugality, would be to cap the increase per student at the same *dollar* amount (say \$475), instead of a percentage, for all districts.

An even better solution would be to use an accurate model of each district’s unique needs and circumstances, as part of the finance formula, to ensure that every student’s education is adequately funded to meet state standards.

Not all incentives are monetary. They can take the form of relaxation of reporting requirements, permission for flexibility, public recognition for individuals, etc.

A school funding system that penalizes good performance is self-defeating and bad policy. For that reason, New Jersey should provide *two* systems of incentive: one that helps remedy underperformance, and one that supports ongoing success.

ALIGN FUNDING SOURCES WITH MANDATES. Use state funds to cover *all* state mandates (not just new ones), including the NJ Core Content Curriculum Standards and the Abbott framework. Shift school funding toward the state and away from municipalities.

The Abbott v. Burke decisions by the New Jersey Supreme Court are a recognition that educational equity for all children is a *state*-level mandate. State law must now elevate its treatment of educational equity, as a foundation of school finance formulas, rather than a retrofit patchwork.

ACCOUNTABILITY AND ASSESSMENT

ASSESS AND TRACK EVERY STUDENT's *individual* educational outcomes, from year to year, and even between districts when the student moves. Compare progress next to curriculum programs presented. (Although NJ SMART will collect individual student data, there is no indication that it will collect curriculum/program delivery data, or data about other relevant factors.) Successful programs should be identified, disseminated, and expanded.

As measures of the skills and knowledge that students need to acquire for life success, standardized tests are weak and crude. For that reason, they should be only a small part of assessment: calibration and comparison of other methods.

The majority of assessment should use other types of measurement – covering real-life skills in real situations – and should be designed for formative improvement of understanding. For example, some public schools use evaluation teams, comprising teachers and/or external community members, to assess student performance on relevant tasks such as:

- discuss a novel, its issues raised, structure, perspective, and comparison with other works;
- develop computer program that statistically analyzes a complex social science problem;
- set up and run a scientific experiment, collect and analyze data, and write a results paper.

Assessments should be selected to cover the material that students are taught, not vice versa.

Assessments should be designed to help measure and track each student's yearly educational *growth*, alongside the curriculum content and educational programs/techniques delivered.

TILT THE FORMULAS explicitly for policy objectives. Encourage districts with inadequate outcomes to improve, and districts with good outcomes to stay good. Set spending by outcomes, not arbitrary index levels. Provide for equitable and adequate educational outcomes for every district.

IDENTIFY AND SHARE BEST PRACTICES. Many New Jersey schools are floundering because leaders don't know which educational practices, curricular programs, and organizational structures work best. As a result, many of them end up spending large amounts of money on less-effective practices/programs/structures.

At the state level, New Jersey has little ability to gather and track data about educational practices and outcomes. As a result, it's hard to determine which practices work.

The state should beef up its education data capabilities. Beyond that, New Jersey must actively promote educational research and experimentation, measure results, encourage benchmarking, disseminate information about practices that work, and promote adoption of successful practices.

STABILITY, DURABILITY, AND RESILIENCE

CHANGE GRADUALLY. Phase in any significant tax changes or school budget changes gradually, over several years, so that districts and taxpayers can adapt.

ASSIST TRANSITION. For school districts with less-efficient practices, provide extra training and expertise to help them focus resources for greatest impact on student outcomes.

ESTABLISH A STATEWIDE FORUM for resolving student-school disputes, to channel them outside the courts. Such disputes often relate to the education of students with special needs. Mediation and problem-solving should be used, rather than costly and lengthy lawsuits.

Although New Jersey requires some mediation in such cases, the process is not uniform; cases are handled differently among mediators. The lack of statewide consistency makes it hard for the state (and the students) to benefit from experience, learning, and generalization across cases.

The forum should be specialized, independent, quick, fair, uniform, and binding.

SET MODEL DIMENSIONS BY ADMINISTRATIVE PROCESS, not directly by law. New Jersey sets model dimensions (number of students in district, number of classrooms, number of teachers, busing mileage, heating fuel, etc.) by legislation. This has caused expensive problems:

- Some key dimensions were omitted, such as teacher seniority. Districts that keep more senior teachers are shortchanged, because formulas ignore the higher salary cost – while districts with many new hires might be overfunded in comparison.
- Other important omitted factors were spliced on later, such as “parity aid” for poor districts. Such dimensions are each computed using an entirely separate framework, leading to great complexity and inaccurate funding.
- Lawsuits were initiated in shortchanged districts, leading to costly litigation, multi-year delays in delivering adequate education, judicial invalidation of formulas, disruption of fair funding of all districts, and attention diverted to dollars rather than education.

Instead, New Jersey would benefit by adopting a completely different approach to school finance formulas. The legislature should keep control of major policy, such as the overall level of state funding contribution to public schools, and the balance between income and property as measures of taxable wealth.

But the legislature should shift the *details* of the models to an ongoing *administrative* process. The administrative process would refine the model input dimensions and weights annually, based systematically and objectively on data gathered from all school districts.

Probably the administrative process would be run by an independent commission, with a mandate for full transparency, openness, and objectivity. Although the legislature would keep its prerogative to intervene, its charter to the commission would spare it from *having* to do so.

Rather than filing a lawsuit, a district that feels shortchanged would publicly submit a proposed update to the *model* dimensions. The update would be *administratively accepted* if it meets objective criteria. The criteria would include

- the dollar amounts resulting from the update (to exclude trivial updates),
- the extra cost of data collection (to exclude updates that aren’t worth the effort), and
- the updated model’s accuracy (to exclude updates that favor the few at the expense of the many).

By providing administrative channels for automatic recourse in improving and fixing the model, the state will avoid some costly challenges, and possible defeats, in court.

For rejected update proposals, litigation remains possible. But the state’s legal vulnerability and exposure are lessened, because the administrative review criteria provide defensible rationale (avoiding arbitrariness), and because they do so uniformly. Every proposed update is implicitly submitted on behalf of, and judged with application to, a class (all New Jersey school districts) rather than single plaintiffs.

The administrative process would keep the finance models and formulas within a single common framework which captures the complexities and particularities of all school districts. This will ensure that school funding stays understandable, visible, and honest.

The benefits of empowering an administrative process to accept formula modifications include:

- requiring districts that feel shortchanged to explain *why*, in objective, uniform terms,
- channeling *constructively* the displeasure of districts that feel shortchanged, toward investigating reasons and proposing fair solutions,
- giving real hope to districts that feel shortchanged, that their proposed updates can be automatically accepted if they meet objective criteria,
- identifying specific areas of possible over/underspending for all districts, and
- providing cover for legislators, against districts that seek more money without justification: public exposure of such districts' inability to justify additional funding.

Until a single common framework for school finance is established, New Jersey will remain unable to evaluate and compare educational programs on an apples-to-apples basis, and accordingly to make wise funding decisions.

DON'T SHIRK MAJOR POLICY DECISIONS. New Jersey hasn't successfully established a school finance formula for a generation, though it has tried about every 5–7 years. Courts have repeatedly invalidated its attempts. No statewide formula has been in effect since 2002.

The courts' message is clear. Constitutional principle comes first.

The New Jersey legislature can respond by passing a new kind of school finance formula: one that first establishes a framework of intent and principle, and then subordinates financial and political decisions within the framework.

With a 25–50 year outlook, the framework must address

- the issues that have drawn litigation, such as educational equity,
- issues that may draw the next round of litigation, such as educational adequacy,
- institutional foundation of wise, long-term, sustainable financial practices which outweigh annual political expedients,
- institutional improvement of decision-support, by better educational research and better data gathering and tracking,
- sharpening the accuracy of formulas, to spread impact more evenly,
- establishing an administrative channel empowered to hear challenges and accept modifications to the models, and
- decision-making principles for fairness, decency, ethics, and wider consensus.

Unless the legislature builds these core elements into a formula framework, chances are high that courts will overturn the new formulas.

New Jersey has a tight, even dire, financial outlook for the next generation. It was caused partly by inaccurate models and formulas (in retirement pensions and other areas), and partly by pressures to let short-term expedients override long-term discipline.

Can the state afford another failure of its school finance formulas? We must get it right this time.

9. PRINCIPLES OF PROCESS

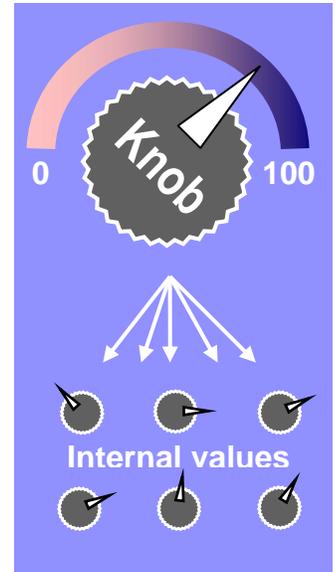
Public confidence in school finance formulas depends not only on the formulas themselves, but also on how they are developed and how they operate. New Jerseyans want to feel heard, respected, involved, and fairly treated.

FOR THE NJ DEPARTMENT OF EDUCATION

PROVIDE “KNOBS” for legislative policy choices. These are variables in a proposed formula whose values are specifically identified as open to legislative choice. They serve as advice on framing legislative debate. They simplify legislative decisions by encapsulating several internal numbers in the formula as a single external variable.

For example, one hypothetical knob might be “How much budgetary control may a county executive superintendent exert over a local district’s budget?” Legislators can give that knob a value between 0% (no control) and 100% (absolute control).

Within the formula, that single knob affects many internal values. For example, a strong executive superintendent might reduce several costs, by coordinating bus routes, centralizing some district business administration, or sharing curriculum development. The knobs defined in a proposed formula help legislators understand the meaningful choices and their true impact, rather than focusing on minutiae.



SPECIFY A FALLBACK PATH in case legislators don't fully fund the state’s education needs. As part of the formulas themselves, say explicitly how reduced funding would affect the allocation of education funds. In other words, identify “Total state funding to schools” as a knob.

If less-than-full funding would prevent the state from meeting any of its policies or legal obligations, legislators and the public need to know that in advance.

IF A FULL FORMULA CAN’T BE PREPARED in time for the 2008-09 school year, use a temporary formula, but publicly *commit* to continuing work on the full formula.

LEARN FROM ALL STATES, not just New Jersey’s immediate neighbors. There is great diversity in how public schools are financed across the US, with varying areas of success. New Jersey should survey top education officials in 50 states, to identify financing system strengths and gather ideas. The survey should guide our formula development and refinement.

PUBLICIZE MODELS, FORMULAS, AND RAW DATA. Provide transparency and openness. (Although NJ SMART will be available to education officials and school administrators, there is no indication that its analyses and deidentified data will be available to the public.) Hiding information conveys mistrust of the public.

Whenever state officials contemplate updating a formula or model, they should publicize at least two new versions for debate, not just one. This would give them valuable public input, while shielding them from exposing their initial preference.

REGULARLY SEEK COMMENT on the formulas from the public and from professionals. Develop the formulas through sustained, responsive discussion with all stakeholders, especially the public. The widest variety of school districts should be represented.

FOR LEGISLATIVE DEBATE

USE KNOBS TO FOCUS LEGISLATIVE DEBATE, and exclude irrelevant, arbitrary factors. It’s fine for one legislator to argue that New Jersey should fund 53% of school costs statewide, while another argues 41%.

It's fine to argue for broad policy – for example, to use teacher seniority as a funding dimension because of the desire to retain experienced teachers.

But exclude arguments for any formula on the basis of benefit to a *particular* district. Use knobs to express *policy* choices.

ADDRESS OPPOSING CONCERNS. From the viewpoint of New Jersey residents, legislative success is achieved not when one group of legislators narrowly outvotes another. Success is achieved when one group overcomes its own biases, combines its own goals with its own solution to the *other* group's concerns, and thereby converts enough opponents for a substantial vote margin.

In the eyes of the public, advocates of increasing school funding can win only by adding some restraints on school spending to their proposals. Advocates of school spending restraint can win only by adding funds to cover some areas of school funding shortfall.

EXPLAIN HOW POLICY CONNECTS WITH VALUES. Most New Jerseyans believe in certain principles of fairness, decency, and ethics. People may differ in the degree to which they would translate values into policies and laws. If a formula has features that we can point to and say “here's how the formula implements our core values,” it can gain public support.

Although this document defers policy recommendations, examples of values that can be translated into policy are:

- *Provide for equitable and adequate educational opportunities* for every child, including children with special needs, and special talents. Gain equity by raising educational outcomes up, not by leveling down.
- *Educate children artistically, physically, socially, and emotionally*, not just academically.
- *Put children ahead of ourselves.* As our parents sacrificed for us, we sacrifice for our children. Put education for children ahead of lifestyle benefits for adults. Pay off state debts that were not incurred for children's benefit, rather than pass debts down to the next generation.
- *Adjust for wealth.* Tax progressively, including both income and property wealth.
- *Every tub on its own bottom.* Do not reduce school funding to service debt from poor borrowing decisions in the past.
- *Fairly value teacher and staff compensation* and benefits. Provide for compensation to attract teachers and staff of sufficient quality. Provide support and recognition to keep every teacher fully engaged and effective.
- *Compensate for uncontrollable factors.* Historically New Jersey has compensated school districts at least partially for uncontrollable factors – for example, transportation aid to districts that require busing, parity aid to poor districts, special education aid. A fair, supportable formula would compensate for all significant uncontrollable factors.
- *Retain home rule, funded by locally-controlled tax.* Use the state's school finance formulas only at the district level, not to impose policy or spending *within* districts. Free districts to set local policy, programs, curriculum, etc. They may voluntarily spend more than state foundational minimums, to enhance education and improve community desirability and residential property values.
- *Provide “categorical” (wealth-blind) aid for special education.* For many of the wealthier school districts, that is the only significant state funding that they receive.
- *Replace some local property taxes via a statewide uniform property tax rate.* Use equalized valuations to adjust for differences in assessment practices between municipalities. Collect via existing local tax billing systems. For state mandates, this is fairer because it reduces the existing wide variation in property tax rates across the state.

- *Linkage: Use a small statewide uniform property tax rate exclusively to fund categorical aid for special education. Neither the state nor federal government has fully funded their special education mandates, leaving local property taxes to fill the gap – with mixed results. Allow full portability, and reduce local property tax, by shifting special education to a statewide tax rate on equalized property values.*
- *Encourage local placement for special education students, rather than out-of-district placement. Saves money and improves education.*
- *Reduce the regressiveness of property taxation, by implementing a self-supporting property tax deferral program, at no cost to the state, municipalities, or taxpayers. It gives seniors some of their property wealth as cash, without making them wait until they sell their home. (The state can also combine it with tax reduction, like New Jersey’s Senior Tax Freeze.)*
- *Remove obstacles to sharing of services between districts. Reduces administrative overhead.*

The examples above reflect values that have been articulated by various individuals and organizations in New Jersey. It is up to the state legislature to choose and prioritize the values to be embodied in school finance formulas.

10. ACCURATE FORMULAS SAVE MONEY

New Jersey can reduce financial waste by developing a model that more accurately predicts current actual spending in all school districts. Such a model would improve understanding of school spending and allow spreading of successful practices. The model should serve as a starting point for a new school funding formula that aligns incentives for improvement and success.

QUESTIONS BEFORE ACTION

Several major questions would need to be settled before a new school finance formula framework, as described here, can be developed, including:

- Is there enthusiasm from a broad, diverse set of residents and organizations? Are there volunteers who want to work together to develop a specific proposal?
- Will New Jersey’s finances become desperate enough that common sense and long-term views might prevail?
- Can New Jersey’s dire finances be leveraged for good? Is there a cautionary tale that might persuade residents and officials to support better government practices?
- Is there more hope for financial recovery within New Jersey’s existing system for school finance, or instead within a sensible but idealistic vision requiring deep changes?
- Can political leaders and advocacy groups be persuaded to participate fully in the development process, for the good of the state as a whole?
- Can political leaders and advocacy groups be encouraged to consider the changes that might emerge – more openness and objectivity in school finance, and less subjective discretion?
- Can the state stay committed long enough to developing a new framework, during which time the schools would continue to be funded temporarily under the existing framework?
- What time frame and cost range would be needed to implement a specific proposal?
- Does the New Jersey Department of Education have all the necessary expertise? If not, where would it be found? How can NJDOE staff, including county superintendents, be involved?
- How can the data collection process handle the wide variation in accounting practices and categories used by New Jersey school districts?

- What steps can reduce opportunities for “gaming” the system, by miscategorizing expenses or other manipulations?

CONCLUSIONS AND NEXT STEPS

The search for revenue has been the biggest obstacle to improving New Jersey’s public education system and school finance. This document has identified new potential sources of revenue, right in our legislature’s front parlor.

For interested members of the public, stakeholders, legislators, and officials, the next steps are:

- Broader, statewide *discussion*, seeking more views on school finance formula development.
- Working together as a volunteer committee to create a *specific proposal* for a new formula development framework.
- Working with the legislature, governor, and officials to create *legislation*.

All interested New Jerseyans are invited to participate.

One challenge in this effort will be to persuade our elected officials in Trenton that they can have a direct, personal effect on solving the state’s financial crisis. Is the legislature willing to take the needed steps?

- Increase the accuracy and diligence with which *impact* is assessed, both on taxpayers and on school spending – and then work to spread impact as evenly as possible.
- Add the infrastructure necessary for New Jersey leaders to develop accurate *understanding* of which educational programs and practices actually work, and which ones are best matched for each of our diverse school districts.
- Develop the modeling and communications infrastructure necessary to publicly show and defend the opportunities for *long-term* savings versus short-term expediency.
- Step to a higher level of policy oversight, establishing a framework within which an administrative process can manage the lower-level, objective details of school finance model refinement, so that disputes about formulas are less likely to result in litigation.
- Trade off some direct legislative power over low-level school finance, in exchange for greater control over the state’s higher-level financial health.
- Develop a systematic approach to *incentives*, to help schools improve performance and maintain success.

It’s not too late for New Jersey to implement reasonable, commonsense, nonpartisan changes like these. We may find that New Jersey has no other untapped revenue source so big. The potential savings – and educational improvement – are more than enough to justify the effort.

RECOMMENDED READING

- Augenblick, Palaich and Associates, papers on school costing-out, www.APAConsulting.net .
- Department of Education, State of New Jersey, “Planning for a new school funding formula,” www.state.nj.us/education/sff/ .
- Dollar\$ and Sense, www.DollarsAndSense.bz .
- Education Law Center, www.EdLawCenter.org .
- Garden State Coalition of Schools, “School facts - information & funding data & reports,” [www.GSCSchools.org/gsc/School_Facts - Information & Funding Data & Reports/](http://www.GSCSchools.org/gsc/School_Facts_-_Information_&_Funding_Data_&_Reports/) .
- Winnie Hu, “Schools move toward following students’ yearly progress on tests.” *The New York Times*, July 6, 2007, www.nytimes.com/2007/07/06/education/06test.html .
- Institute on Education Law and Policy, Rutgers University, IELP.rutgers.edu .
- Kelley Blue Book, www.KBB.com .
- New Jersey School Boards Association, “How a new school funding system should work,” www.NJSBA.org/press_releases/funding-white-paper.pdf .
- New York Performance Standards Consortium, www.PerformanceAssessment.org .
- Lawrence Picus, “Does money matter in education? A policymaker’s guide.” In WJ Fowler, *Selected Papers in Education, 1995*, www.eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED408691 .
- Ernest Reock, “Possible cost savings if proposed consolidated K-12 school districts budgeted as existing unchanged ... districts.” www.LWVNJ.org/news/School_District_Cluster_Paper.pdf .
- Robert Rothman, “(In)formative assessments: New tests and activities can help teachers guide student learning.” *Harvard Education Letter*, November/December 2006, www.TimeOutFromTesting.org/0519_article_harvard.php .
- Richard Rothstein, “The myth of public school failure.” *The American Prospect*, 1993, www.prospect.org/cs/articles?article=the_myth_of_public_school_failure .
- Sam Savage, “The flaw of averages,” www.stanford.edu/~savage/faculty/savage/FOA_Index.htm .
- VALUE NEW JERSEY, Proposals and testimony on school finance, www.ValueNJ.org .
- WhatKidsCanDo.org, “Forging habits of inquiry at Urban Academy,” *Student Learning in Small Schools*, www.WhatKidsCanDo.org/archives/portfoliosmallschools/urban/urbanintro.html .

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VALUE NEW JERSEY (ValueNJ.org) is a nonpartisan, statewide network of residents and activists.

- We value and appreciate the positive aspects of New Jersey.
- We appreciate good value in NJ state and municipal government.
- We support positive values of integrity, success, and improvement in our schools, towns, and state.

APPENDIX A: Simple model with many dimensions

A hypothetical spending model is shown on the left side of the figure below. The weight values would be derived by a regression fit of data from *all* New Jersey school districts.

On the right side, the model is applied to one hypothetical school district, to generate predictions of that district's spending in each dimension. For any other district, the *same* model is used, but it is applied to that district's characteristics.

The predictions are compared to the district's actual spending. The comparison can be made in each dimension. Or, as shown in the figure, a single aggregate comparison can be made for the district's total spending.

SPENDING MODEL			Moddleburg Regional School District	
Dimension	Weight	Unit	CHARACTERISTIC	PREDICTED \$
Base cost per high school general-education student	\$5,053	× number of students	3,403	\$17,195,359
+ Additional cost per year of teacher seniority	\$1,689	× number of teachers × average seniority	295 11.3 years	\$498,266
+ Annual cost per student-mile for busing	\$63	× number of bus student miles	15,488	975,744
+ Additional cost per student for special education services in speech	\$380	× number of students needing these services	112	42,560
+ ... (more dimensions)	×
MODEL-PREDICTED TOTAL SPENDING				= \$43,922,477
ACTUAL TOTAL SPENDING			Moddleburg Regional	− \$42,139,010
DIFFERENCE				= \$ 1,783,467

DISTRICT	DIFFERENCE	Squared difference
Moddleburg Regional School District	\$1,783,467	3180754540089
Samletown School District	−\$247,243	+ 61129101049
Hypothetic City School District	−\$14,207	+ 201838849
Sum of squared differences		= 306621093532205
÷ Number of public school students in New Jersey		+ 1,428,571
= MODEL INACCURACY SCORE per student		= 214634829

A sum-of-squared-differences calculation, normalized by the number of students, can be used as an accuracy measure for the model as a whole. Greater values indicate less accuracy.

A realistic school finance model would have a somewhat more complex structure. For example, inflation can be incorporated more accurately as an overall *multiplication* by an annual percentage, rather than an *additive* factor.

APPENDIX B: U.S. state+local tax rates, 2005

STATE	Population (1,000)	Personal state+local taxes (\$1,000)	Personal state+local taxes per capita	Personal income per capita	Personal income after taxes per capita	Personal STATE+ LOCAL TAX RATE	Consumer relative cost of living	Buying power before taxes		Buying power after taxes	
								per capita	RANK	per capita	RANK
ny	19,255	97,825,153	5,081	39,967	34,886	12.71%	122%	32,760	32	28,595	39
dc	551	3,581,747	6,500	52,811	46,311	12.31%	98%	53,889	1	47,256	1
me	1,322	4,913,502	3,717	30,808	27,091	12.06%	94%	32,774	31	28,821	37
hi	1,275	5,281,705	4,143	34,489	30,346	12.01%	122%	28,270	50	24,874	50
vt	623	2,405,714	3,861	32,717	28,856	11.80%	101%	32,393	37	28,570	40
la	4,524	12,613,913	2,788	24,664	21,876	11.30%	88%	28,027	51	24,859	51
ri	1,076	4,257,760	3,957	35,324	31,367	11.20%	109%	32,407	35	28,777	38
wi	5,536	19,698,371	3,558	33,278	29,720	10.69%	90%	36,976	11	33,022	14
oh	11,464	38,634,047	3,370	31,860	28,490	10.58%	92%	34,630	27	30,967	29
ct	3,510	17,522,795	4,992	47,388	42,396	10.53%	111%	42,692	2	38,194	2
ne	1,759	5,925,562	3,369	32,923	29,554	10.23%	86%	38,283	5	34,365	7
in	6,272	19,942,097	3,180	31,173	27,993	10.20%	89%	35,026	24	31,453	26
ut	2,470	6,833,448	2,767	27,321	24,554	10.13%	95%	28,759	49	25,847	49
ar	2,779	7,487,392	2,694	26,681	23,987	10.10%	84%	31,763	39	28,556	41
nj	8,718	38,082,322	4,368	43,831	39,463	9.97%	113%	38,788	4	34,923	5
mn	5,133	18,948,754	3,692	37,290	33,598	9.90%	98%	38,051	8	34,284	8
ia	2,966	9,168,705	3,091	31,670	28,579	9.76%	87%	36,402	14	32,849	15
ks	2,745	8,781,776	3,199	32,866	29,667	9.73%	88%	37,348	10	33,712	11
il	12,763	44,862,942	3,515	36,264	32,749	9.69%	100%	36,264	15	32,749	17
mi	10,121	32,173,165	3,179	32,804	29,625	9.69%	96%	34,171	28	30,860	30
ca	36,132	128,576,405	3,559	36,936	33,377	9.63%	114%	32,400	36	29,278	34
US	295,860	979,526,481	3,311	34,471	31,160	9.60%	100%	34,471		31,160	
az	5,939	16,895,405	2,845	30,019	27,174	9.48%	97%	30,947	46	28,015	46
ma	6,399	26,280,375	4,107	43,501	39,394	9.44%	116%	37,501	9	33,960	9
id	1,429	3,836,981	2,685	28,478	25,793	9.43%	92%	30,954	45	28,036	45
wy	509	1,781,213	3,499	37,305	33,806	9.38%	90%	41,450	3	37,562	3
ms	2,921	6,839,515	2,341	25,051	22,710	9.35%	85%	29,472	48	26,717	48
wa	6,288	20,848,711	3,316	35,479	32,163	9.35%	100%	35,479	20	32,163	22
wv	1,817	4,481,722	2,467	26,419	23,952	9.34%	84%	31,451	42	28,515	42
ga	9,073	25,963,624	2,862	30,914	28,052	9.26%	95%	32,541	33	29,529	33
nm	1,928	4,962,693	2,574	27,889	25,315	9.23%	92%	30,314	47	27,516	47
ky	4,173	10,887,029	2,609	28,272	25,663	9.23%	89%	31,766	38	28,835	36
nc	8,683	24,793,079	2,855	31,041	28,186	9.20%	91%	34,111	29	30,973	28
pa	12,430	39,314,093	3,163	34,937	31,774	9.05%	99%	35,290	21	32,095	23
nv	2,415	7,809,098	3,234	35,744	32,510	9.05%	99%	36,105	16	32,839	16
mo	5,800	16,320,949	2,814	31,231	28,417	9.01%	88%	35,490	19	32,292	19
sc	4,255	10,821,237	2,543	28,285	25,742	8.99%	91%	31,082	43	28,288	44
md	5,600	20,985,605	3,747	41,972	38,225	8.93%	110%	38,156	7	34,750	6
va	7,567	24,880,344	3,288	37,503	34,215	8.77%	102%	36,768	12	33,544	12
nd	637	1,704,192	2,675	31,357	28,682	8.53%	88%	35,633	17	32,593	18
mt	936	2,312,205	2,470	29,015	26,545	8.51%	92%	31,538	40	28,853	35
fl	17,790	51,385,446	2,888	34,001	31,113	8.50%	97%	35,053	23	32,075	24
tx	22,860	62,977,325	2,755	32,460	29,705	8.49%	92%	35,283	22	32,288	20
co	4,665	14,645,473	3,139	37,510	34,371	8.37%	98%	38,276	6	35,072	4
or	3,641	9,784,693	2,687	32,289	29,602	8.32%	104%	31,047	44	28,463	43
ok	3,548	8,638,293	2,435	29,948	27,513	8.13%	86%	34,823	25	31,992	25
ab	4,558	10,388,574	2,279	29,623	27,344	7.69%	87%	34,049	30	31,430	27
sd	776	1,924,287	2,480	32,523	30,043	7.62%	89%	36,543	13	33,756	10
tn	5,963	13,817,593	2,317	30,969	28,652	7.48%	89%	34,797	26	32,193	21
nh	1,310	3,510,675	2,680	37,768	35,088	7.10%	106%	35,630	18	33,102	13
de	844	1,858,693	2,202	37,088	34,886	5.94%	114%	32,533	34	30,602	31
ak	664	1,360,084	2,048	35,564	33,516	5.76%	113%	31,473	41	29,660	32

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