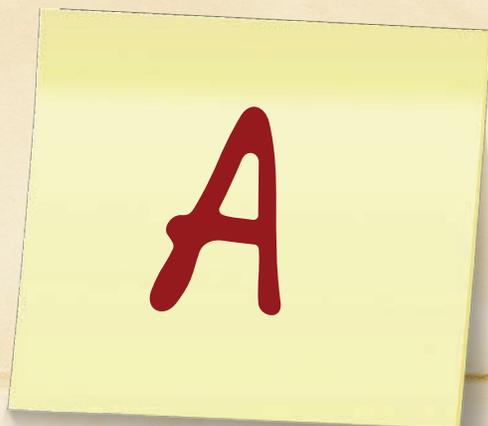




SMART GROWTH SCHOOLS REPORT CARD

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PlaceMakers, LLC
August 15, 2009
v2.2



Smart Growth Schools Report Card

What is the Smart Growth Schools Report Card?

Many reports, studies and presentations have been produced about smart growth development in relation to K-12 schools. The Smart Growth Schools Report Card is a compilation of the best practices from this body of work--- translated into eleven performance-based criteria. The Report Card describes these criteria, then provides four or five options for addressing each of them. Each of the options corresponds to a letter grade that permits a local community to assess its efforts.

Why do we have a Smart Growth Schools Report Card?

Currently, most school planning ignores or undermines a community's efforts to implement smart growth development. The purpose of the Smart Growth Schools Report Card is to provide school boards, municipalities, developers and citizens a helpful, easy-to-use tool that fosters better decision-making by outlining a range of options that take into account issues pertaining to smart growth development. Understanding these options will:

1. Save the community money.
2. Decrease the environmental impact of the schools on the community.
3. Improve the health of students.
4. Increase long-term support for the school system by those who do not have school-aged children.

What are the principles of Smart Growth?

Smart Growth is a development strategy that consists of a series of principles geared toward fostering more intelligent development patterns. The ten principles of Smart Growth are:

1. Foster distinctive, attractive communities with a strong sense of place.
2. Create walkable neighborhoods.
3. Provide a variety of transportation choices.
4. Strengthen and direct development towards existing communities.
5. Mix land uses.
6. Create a range of housing opportunities and choices.
7. Take advantage of compact building design.
8. Preserve farmland, natural beauty, open space and critical environmental areas.
9. Make development decisions predictable, fair and cost effective.
10. Encourage community and stakeholder collaboration in development decisions.

Is the Report Card used to increase school academic performance?

It may provide an indirect positive effect (e.g., healthier kids, or a healthier learning environment), but this tool is not used for evaluating academic performance.

How are the criteria scored?

Criteria are based on a grading scale, though not modeled after a typical academic scale. For example, a "C" score on a typical academic scale equates to average or below-average performance. In this system, however, a "C" is awarded to those who would serve as a good local model. We hope that your community aspires to better performance, and this grading scale will accommodate that desire. Specifically, the grades reflect the following performance:

- F = asleep at the wheel
- D = talking about improving things, but not doing much
- C = good local model
- B = regional or state model (people are writing about what you're doing)
- A = national model (people are flying in to see what you're doing)

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FULL COST ANALYSIS

Will old schools be restored rather than replaced so long as the cost is less than a new school? This is a separate question than whether the school building will be recycled for another use (i.e., adaptive reuse).

Costs to citizens include much more than just the expenses that are directly paid by the school system such as construction costs. The real costs also include busing expenses, long-term energy costs, expected road expansions, water utilities, sewerage, fiber optics, fire and rescue services, environmental costs (such as water or air pollution), and items that are generally hard to quantify like the economic impact on the neighborhood, the loss of agricultural land, the increased amount of time that the community must spend in morning rush hour, the improved the health of the students through increased light or decreased mold in the air, or the increased health and property losses as a result of increased teenager driving. This process of identifying all costs should also be as transparent as possible.

A	Cost Analysis and 100%. A published analysis is required of the “real costs” of building a new school versus restoring an existing school, and there is a rule that requires an existing school to be restored so long as it costs less than the total cost of a new school.
B	Cost Analysis and No Rule. A published analysis is required of the “real costs” of building a new school versus restoring an existing school, but there is no rule pertaining to whether a new school must be restored.
C	Cost Analysis and 85%. A published analysis is required of the “real costs” of building a new school versus restoring an existing school, and there is a rule that requires an existing school to be restored so long as it costs less than 85% of the total cost of a new school.
D	No Cost Analysis and No Rule. No policy on the restoring of schools.
F	70%. An existing school may be restored only if it costs less than 70% of the cost of building a new school.



Mountain Brook Elementary,
Mountain Brook, Alabama

Full Cost Analysis

Are you considering all costs associated with a school development project? Do you have the freedom for restoration so long it costs less than new construction?

Costs to citizens include much more than just the expenses that are directly paid by the school system such as construction costs. The real costs also include busing expenses, long-term energy costs, expected road expansions, water utilities, sewerage, fiber optics, fire and rescue services, environmental costs (such as water or air pollution), and items that are generally hard to quantify like the economic impact on the neighborhood, the loss of agricultural land, the increased amount of time that the community must spend in morning rush hour, the improved the health of the students through increased light or decreased mold in the air, or the increased health and property losses as a result of increased teenager driving. This process of identifying all costs should also be as transparent as possible.

Reasoning

One of the most common issues facing school districts is whether an existing school should be renovated, added onto, or closed in favor of building a new school-- typically somewhere else in the community. Due to the importance of schools to neighborhoods, this decision can have a dramatic impact upon neighborhood property values and development patterns---- for better or worse.

Oftentimes, this decision is divorced from the community's simultaneous, yet separated, efforts to guide growth and development to match an agreed upon vision for the community. Instead, the decision is usually made with considering one factor---- cost to the school district. And oftentimes, the cost is judged on a per pupil basis instead of a per graduate basis or some other performance-based criteria.

Cost should always be considered, but the fact remains that rarely are all of the costs actually considered. For example, the State of Ohio only considers a limited menu of costs (i.e., construction costs), and it mandates that existing schools be abandoned if renovation costs exceed 75% of those limited costs.

To make matters worse, oftentimes the calculation of costs is performed or heavily influenced by those who have the most to gain from the construction of a new school--- architects, engineers, general contractors and suppliers who are likely to benefit more from the construction of a new school.

Finally, the costs that are usually considered do not include the costs that will be incurred by the community at large--- only the costs directly incurred by the school district. For example, if a new school would force many parents to start driving their kids to school each morning, these added costs to the parents in terms of money and time are not considered. Similarly, if a new school requires new infrastructure to be created--such as widened roads, traffic lights or utilities---those are rarely considered.

Hurdles

Money and Time. It will cost money and time to do a full cost analysis. Note that these expenses can oftentimes be justified by the amount of savings that can be generated by a careful cost analysis.

Budget Responsibility Split & Coordination. Considering all costs, not just costs to the school district, requires the school district to consider costs by other entities, and could lead to decisions that might cost the school district more money (even though the community as a whole might benefit). In addition, other entities might be unwilling to spend time collaborating with the school district when there is no legal requirement to do so. This task can be further complicated by the fact that many school district boundaries do not mirror the boundaries of other local governmental entities involved in the process.

Government Mandates. State rules might require local school districts to abandon existing schools in favor of new schools based upon an arbitrary cost analysis mechanism (e.g., 75% rule). To overcome this hurdle, consider seeking an exception or variance. Alternatively, be prepared to change the rule.

Special Interests. As mentioned previously, certain special interests that have something to gain from the outcome of the decision (e.g., architects, engineers, general contractors, etc.) are likely to fight against a more open and transparent decision-making process.

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HOLISTIC PLANNING

Is school planning done in conjunction with land planning and transportation planning or are these segregated?

A	School, Land Use and Transportation Planning in Sync. School system planning is done in conjunction and is consistent with land use planning and transportation planning.
B	School and Transportation Planning in Sync. School system planning is done in conjunction and is consistent with transportation planning.
C	School and Land Use Planning in Sync. School system planning is done in conjunction and is consistent with land use planning.
D	School Master Plan. School system has a master plan for how it will grow or contract.
F	No School Master Plan. No master plan exists for school system.



Holistic Planning

Is school planning done in conjunction with land planning and transportation planning or are these three planning disciplines strictly segregated?

Reasoning

Currently, the greatest hurdle to the implementation of Smart Growth development patterns is the strict segregation of land planning, transportation planning and school planning. Typically, a school is planned by one entity, the streets surrounding the school by another entity, and the land around the school by a third entity.

As one might imagine, this balkanization of the overall planning process leads to some bizarre and unfortunate consequences. For example, a local planning department might use an existing school as a key ingredient to the revitalization of a neighborhood. Meanwhile, the school district might want to close the school because enrollment has been declining for years. At the same time, the neighborhood might have experienced a decline because the streets were not properly designed (i.e., cars go too fast because the lanes are too wide, or the retail section of the community might have been abandoned because the street was turned into a one-way street).

Getting all three entities to act in concert when those entities have a different set of priorities and concerns is a difficult task to say the least. And the bottom line is that when all three planning disciplines are needlessly out of sync, they invariably lead to unintelligent growth patterns. Indeed, how effective can a school "master plan" be if it is not master over the crucial details surrounding the school such as land use or transportation design?

Think of it as a three-legged stool. All it takes is for one leg to be broken for the overall effort to be compromised. The most common example of where the stool collapses is when a new school is built next to new housing, but due to the design of the school and the streets, the new school is not walkable or bikable due to a high speed arterial thoroughfare that disconnects the school from the surrounding neighborhoods.

Hurdles

- **Separate Silos.** Budgets as well as the decision-making authority over streets, schools and neighborhoods fall under the jurisdiction of different governmental entities--- entities that often do not even share the same jurisdictional boundaries as the school district. And since there is rarely any requirement for the three different entities to work together, these entities are not accustomed to working together even though they could benefit the community by doing so.
- **Extra Uncompensated Time.** Government employees that take the extra time to voluntarily collaborate with other government employees in different silos are not directly compensated for those efforts.
- **Fear of Diminished Authority.** The process of collaboration necessarily involves a degree of compromise. Oftentimes, stakeholders who are unaccustomed to having to coordinate with other entities are loathe to subject themselves to a process where they feel as though they are losing some degree of control.

Example

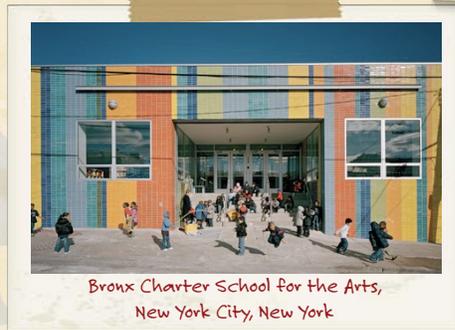
Providence K-8 School, Huntsville, Alabama.

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COMMUNITY BUY-IN

Is the school planning process designed in a way to secure meaningful community input prior to key decisions being made?



A	Multiple Scenarios, Full Impact Analysis, and Formal Input. Community given multiple school planning scenarios; given the economic/visual/environmental/social impact of those different scenarios; a meaningful formal process for the community to express their preference for one of the multiple planning scenarios.
B	Multiple Scenarios, Limited Impact Analysis, and Meetings. Community given multiple school planning scenarios; given the economic/visual impact of those different scenarios; meetings held to secure feedback from the community on school planning decisions.
C	Multiple Scenarios, No Impact Analysis, and Meetings. Community given multiple school planning scenarios; not given the economic/visual/environmental/social impact of those different scenarios; meetings held to secure feedback from the community on school planning decisions.
D	No Multiple Scenarios, No Impact Analysis, and Meetings. Community not given multiple school planning scenarios; not given the economic/visual/environmental/social impact of suggested school planning decisions; meetings held to secure feedback from the community on school planning decisions.
F	No Multiple Scenarios, No Impact Analysis, and No Meetings. Community not given multiple school planning scenarios; not given the economic/visual/environmental/social impact of suggested school planning decisions; no meaningful formal process for voicing a preference for school planning decisions.

Community Buy-In

Is the school planning process designed in a way to secure meaningful community input prior to key decisions being made?

Reasoning

Meaningful input occurs when:

1. A person is given several different options from which to choose;
2. The impact of choosing one option over another is disclosed;
3. A person is given the opportunity to voice their support for one of the options.

Generating meaningful input produces two tangible benefits to a community:

1. Better decisions can be made because the quality of input tends to be better; and
2. Citizens will fight harder to safeguard and support the decision long after the decision is made. In other words, citizens are more likely to fight for decisions in which they had a hand in making, than in decisions in which they had no involvement.

Given the fact that families with school-aged children tend to be a minority of households in many jurisdictions today, it is critical for school districts to build support for their efforts from parents of non-school-aged children. There are several ways to do this--- most notably making the school useful to folks other than school children after school hours. Another way to do this is to make those folks part of the decision-making process.

Also note that parents of school-aged children do not remain parents of school-aged children forever. Therefore, securing meaningful buy-in while they have kids in school is likely to generate stronger support over time (after their kids grow out of the system) than if they did not have a hand in the decision-making process.

Once a meaningful vision is derived from meaningful community input, the community should consider methods for teaching the agreed upon vision to future citizens; i.e., students. This can be done with a book (e.g., the Wacker Manual), video or other effective media.

Hurdles

- **Money.** Lack of will to invest in multiple design scenarios, impact analysis, or a mechanism for securing feedback from the community. This hurdle should be easily overcome given the fact that the cost of these tools will usually be repaid in terms of savings or support for the chosen outcome.
- **Lack of Quality Options.** Just because you provide options does not mean that they are good options. A community must strive toward providing high-quality options, and this sometimes involves taking advantage of experts from outside the community to help guide local designers.

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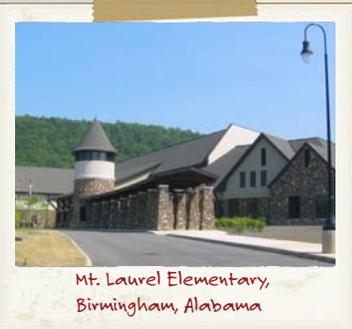
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ELIMINATION OF DESIGN CONSTRAINTS

Do you have the flexibility to design the school efficiently for the site and the community-----
or are there one-size-fits-all rules governing design such as:

- (1) minimum acreage requirements;
- (2) programmatic design requirements such as
 - (a) parking/stacking requirements;
 - (b) prohibition of multi-level schools;
 - (c) minimum square footage requirements for classrooms; or
- (3) maximum costs per square foot?

A	No Acreage; No Design Program; No Max Costs. No minimum acreage requirements; no programmatic design requirements; no maximum construction cost per square foot.
B	No Acreage; Design Program; No Max Costs. No minimum acreage requirements; programmatic design requirements; no maximum construction cost per square foot.
C	No Acreage; Design Program; Max Costs. No minimum acreage requirements; programmatic design requirements; maximum construction cost per square foot.
D	Required Acreage; Design Program; No Max Costs. Mandated minimum acreage requirements; programmatic design requirements; no maximum construction cost per square foot.
F	Required Acreage; Design Program; Max Costs. Mandated minimum acreage requirements; programmatic design requirements; maximum construction cost per square foot.



Elimination of Design Constraints

Do you have the flexibility to design the school efficiently for the site and the community---- or are there one-size-fits-all rules governing design such as:

1. minimum acreage requirements;
2. programmatic design requirements such as:
 - a. parking/stacking requirements;
 - b. prohibition on multi-level schools;
 - c. minimum square footage requirements for classrooms; or
3. maximum costs per square foot.

Reasoning

Some state and local rules governing design call for certain requirements like minimum acreage requirements, prohibition of multi-level schools and parking requirements, that do not allow design flexibility to accommodate the needs of the community.

While these rules might be well-intentioned, they result in unintended consequences that undermine the principles of Smart Growth. For example, minimum acreage requirements attempt to guarantee that all programmatic needs of the school can be met without consideration of how those requirements might be met through alternative means (e.g., shared use of recreational resources). The result of these one-size-fits-all requirements is that it becomes very difficult to build a neighborhood school. Indeed, this is the number one reason why so many schools are placed at the edge of town instead of an infill location that would better serve the students--- as well as the school budget, the health of students, and the environmental impact of the school.

If too much parking is provided for free, it will discourage alternate means of transportation such as walking or biking.

Stacking requirements rarely take into account the ability of a well-designed grid of adjacent neighborhood streets to play the same role without the construction of five acres of asphalt.

The one thing that all minimum design constraints have in common is that they tend to increase the cost of schools. As such, cost tends to be one of the primary arguments in favor of abandoning the design requirements.

Hurdles

- **One Size Fits All Mandates.** Many rules imposed upon local school districts are well-intentioned and work in certain circumstances, but many design constraints have the potential to undermine efforts to build schools that make sense for the community given its unique context.
- **Bias Against Multi-level Buildings.** Due to the fear of students falling down stairs, multi-level buildings can increase liability risk. Classrooms for younger children should be located on the first floor, while the older student classrooms can be on the upper floors. Emphasizing the physical benefits of climbing stairs should also be considered.
- **Fear of Neighborhood Parking Problems.** If a school minimizes its parking lot in order to encourage more walking or biking (or for reducing the required footprint of the school), it might put increased pressure on parking spaces in the surrounding neighborhood streets. The answer to this concern is to actively manage the problem (until it is no longer a problem).
- **Accreditation.** Some minimum design requirements stem from concerns regarding accreditation systems that rate schools on a one-size-fits-all building facilities checklist. Exemptions and variances to these requirements should be made when appropriate. Alternatively, efforts should be considered to remove the regulation or state law that imposes the one-size-fits-all rules.

Examples

Battle Academy for Teaching Learning, Chattanooga, Tennessee.

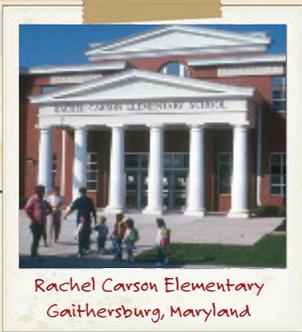
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NEIGHBORHOOD SCHOOL

Is the school embedded into a walkable neighborhood so that most students can reach it safely without the necessity of a car or bus?

A	60%. 60% or more of students regularly walk or bike to school.
B	45%. 45% to 60% of students regularly walk or bike to school.
C	30%. 30% to 45% of students regularly walk or bike to school.
D	15%. 15% to 30% of students regularly walk or bike to school.
F	0%. Less than 15% of students regularly walk or bike to school.



Rachel Carson Elementary
Gaithersburg, Maryland

Neighborhood School

Is the school embedded into a walkable neighborhood so that most students can reach it safely without the necessity of a car or bus?

Reasoning

This is the most important and the most complicated criteria of the Smart Growth Schools Report Card.

It is the most complicated because there is no simple formula for producing walkability. Indeed, getting just one design detail wrong (e.g., the design of the surrounding streets) could completely undermine an otherwise flawless effort to produce a walkable neighborhood school. That is why the grading scale defaults to a performance-based criteria; i.e., how many kids actually walk or bike as opposed to whether certain design criteria have been followed.

It is the most important criteria because so many benefits stem from a walkable neighborhood school; i.e., money saved on transportation costs, decreased environmental impact, improved health of students, increased extracurricular participation and parental involvement due to the increased convenience, provide independence and responsibility for the kids, increased support for the school by parents of non-school aged children, etc.

The problem is that walkable neighborhood schools are rare today. That was not always the case. For instance, in 1960 as many as 60% of school aged children regularly walked or biked to school. Today, the average is estimated to be between 10% and 15%.

The actual design criteria that should be considered is too exhaustive to mention here, but a helpful checklist can be found in "Design Guidelines for Pedestrian-Friendly Neighborhood Schools" which can be found on the Resources page at www.smartgrowthschools.org.

Please resist the urge to reduce the actual design criteria to one or two crude measures such as the existence of sidewalks or crosswalks. A holistic approach must be taken in order to be effective.

Hurdles

- **Segregation of Transportation, Land and School Planning.** So long as the school planners do not have control over the nature of the streets or the nature of the neighborhoods around their schools, they do not control the necessary variables to generate a walkable neighborhood school. Thus, it is imperative that all three disciplines of planning collaborate.
- **Minimum Acreage Requirements.** As set out previously, the unintended consequence of minimum acreage requirements is that it tends to push away schools from neighborhoods in favor of large isolated parcels that are adjacent to roads that would prevent safe walking or biking.
- **Prohibitions on Shared Use.** One way to accommodate schools on smaller footprints (which can more easily fit into a neighborhood setting) is if the school is permitted to share certain uses with other civic uses such as ballfields, gym, meeting space or performance theater.
- **Overly Large School Catchment Zones.** Studies have shown that kids are unlikely to walk or bike if they live more than 2 miles away from a school. Thus it is important to try to avoid establishing catchment zones for schools where the majority of kids are more than 2 miles away. Common causes of overly large catchment zones include gerrymandered zones, splitting up schools to serve 3 grades or less, and mega-schools.
- **Lack of Trained Designers.** Many personnel responsible for transportation, land and school planning are not well-trained in the design details necessary to produce a walkable community. Thus, a community might require specialized assistance to achieve the desired results.

Examples

Providence K-8 School, Huntsville, Alabama.

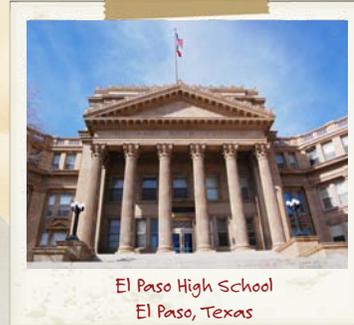
John A. Johnson Elementary, St. Paul, Minnesota.

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PROMINENT SITE

Is the school sited in a prominent location (e.g., terminated vista or on a higher elevation than surrounding properties) so that it communicates the importance the school has in the culture of the community?



A	Terminated Vista; At a Higher Elevation; Neighborhood Center. School terminates a vista, sits at a higher elevation than surrounding properties, and is in a location that is in the heart of the neighborhood center (co-located with other important civic institutions or close to an important intersection).
B	Terminated Vista; Not at a Higher Elevation; Neighborhood Center. School terminates a vista, does not sit at a higher elevation than surrounding properties, and is in a location that is in the heart of the neighborhood center (co-located with other important civic institutions or close to an important intersection).
C	No Terminated Vista; Not at a Higher Elevation; Neighborhood Center. School does not terminate a vista, it does not sit at a higher elevation than surrounding properties, but it is in the heart of the neighborhood center (co-located with other important civic institutions or close to an important intersection).
D	No Terminated Vista; At a Higher Elevation; Not Neighborhood Center. School does not terminate a vista; sits at a higher elevation than surrounding properties, but is not in the heart of the neighborhood center (co-located with other important civic institutions or close to an important intersection).
F	No Terminated Vista; Not at a Higher Elevation; Not Neighborhood Center. School does not terminate a vista, does not sit at a higher elevation than surrounding properties, and is not in the heart of the neighborhood center (co-located with other important civic institutions or close to an important intersection).



Prominent Site

Is the school sited in a prominent location (e.g., terminated vista or on a slightly higher elevation than surrounding properties) so that it communicates to the community the importance the school has in the culture of the community?

Reasoning

The location of civic buildings, including schools, communicates to the community as well as visitors the importance the community places on that civic function. Prior to World War II, it was rare to find any civic institution on any parcel of land that would not be deemed prominent by today's standards.

Today, the opposite is true. In an effort to convince citizens that they are being good stewards of taxpayer dollars, community leaders usually place civic structures such as schools on regrettable parcels of land. These actions are misguided because they look at the cost of the land, not its value as an investment in our children or the future. How is it that our forefathers who had fewer resources than we do could see the value in such an investment, but we are too challenged to do so?

Why should we expect the children in our schools to understand the importance the community places upon its schools if the school district itself cannot communicate the importance of the school by placing it on a parcel with a dignified presence? Indeed, schools placed on regrettable sites are likely to be disposed of when their usefulness expires. Instead of inviting renovation, they will invite disposal.

Prominence can be achieved by terminating a view (e.g., a street terminates in the front door of the school), placing the school at a slightly higher elevation than surrounding properties, or placing the school at the heart of a neighborhood center.

Schools should be a source of community pride and spirit. Locating a school so that it communicates its importance and complements the surrounding neighborhood is not too much to ask for a civic structure that is expected to last for generations.

Hurdles

- **Expense v. Investment.** Too many decision-makers look at a prominent site as an expense as opposed to an investment--- or focus on cost instead of value. Some might even make the argument that this is a luxury that we cannot afford despite the fact that our forefathers were able to afford it with less money than we have. Reminding the decision-makers of the value--- along with the importance of making a wise decision that will have consequences for generations of school children--- is oftentimes enough to overcome this hurdle.

Examples

El Paso High School – El Paso, Texas (elevation)

Crestline Elementary School – Mountain Brook, Alabama (neighborhood center)

Westerly Creek K-8 at Stapleton – Denver, Colorado (terminated vista)

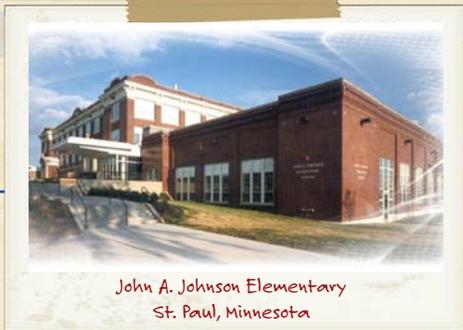
SMART GROWTH SCHOOLS REPORT CARD

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SHARED USE

Is the school sited or designed so that it can share uses with the community such as a gym (or YMCA), park, ballfields, community meeting space, daycare, library, performance theater, art studio, cafeteria/restaurant, community garden, health clinic, computer lab, police substation, etc?

A	<p>Ballfields, Gym + 2 More Additional Shared Uses. Ballfields, gym, and two or more of the following shared with the community: community meeting space, daycare, library, performance theater, art studio, cafeteria/restaurant, community garden, or health clinic.</p>
B	<p>Ballfields, Gym, + 1 More Additional Shared Use. Ballfields, gym, and one of the following shared with the community: community meeting space, daycare, library, performance theater, art studio, cafeteria/restaurant, community garden, or health clinic.</p>
C	<p>Ballfields & Gym. Ballfields and the gym are shared with the community.</p>
D	<p>Ballfields. Ballfields are shared with the community.</p>
F	<p>No shared use.</p>



Shared Use

Is the school sited or designed so that it can share uses with the community such as a gym (or YMCA), park, ballfields, community meeting space, daycare, library, performance theater, art studio, cafeteria/restaurant, community garden, health clinic, computer lab, police substation, etc?

Reasoning

Schools are usually designed and operated as isolated islands; i.e., they only let their assets be used by their students, and they do not benefit from the use of resources from other governmental entities.

Schools that break this pattern of behavior and share resources with other entities enjoy three distinct benefits.

First, they reduce their costs. Costs can be reduced by: (1) eliminating the up-front capital costs of a specific asset; or (2) receiving revenue from other entities for the use of their assets; or (3) reducing the up-front capital costs of a specific asset by sharing those costs with another entity.

Second, they increase support from people who do not have school-aged children. For example, if non-students are granted the opportunity to enjoy the use of the school's basketball gym, those individuals are more likely to support funding for the school system than they would if they had no interaction with the school whatsoever. In short, when a school operates as more than just a school--- a community center-- it is likely to receive substantially greater support than it would if it only catered to the needs of its students only.

Third, communities that share resources with their schools reduce their environmental footprint of the community by reducing the duplication of assets.

Hurdles

- **Fear of Diminished Authority.** The process of collaboration necessarily involves a degree of compromise. Oftentimes, stakeholders who are unaccustomed to having to coordinate with other entities are loathe to subject themselves to a process where they feel as though they are losing some degree of control.
- **Requires More Work.** Sharing assets requires more thinking, more planning and more time devoted to managing the shared nature of the assets----- usually without any increase in pay for these efforts.
- **Insurance & Liability.** When resources are shared, it can generate issues regarding insurance and liability. Which entities must secure insurance, and in what amount? Who is liable if someone is harmed using the resource?

Examples

Edison Elementary School, Glendale, California.

Earl Boyles Elementary School, Portland, Oregon.

Providence K-8 School, Huntsville, Alabama.

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8

FLEXIBILITY

Is the school designed so that it can grow (independent additional wings, floors or structures) or contract in size and services (areas can be removed or adaptively reused if no longer used for school purposes) as the neighborhood grows or contracts so that it remains useful over a longer period of time?

A	Grow or Contract. School is designed so that it can easily grow or contract.
B	Grow, not Contract. School is designed so that it can easily grow, but not contract.
C	Contract, not Grow. School is designed so that it can contract, but it is not designed so that it can easily grow.
F	Neither Grow, nor Contract. School is not designed so that it can grow or contract.



Flexibility

Is the school designed so that it can grow (independent additional wings, floors or structures) or contract in size and services (areas can be removed or adaptively reused if no longer used for school purposes), as the neighborhood grows or contracts so that it remains useful over a longer period of time?

Reasoning

Neighborhoods grow and contract over time. Similarly, the number of school-aged children in a given neighborhood also changes over time. Schools should be designed so that they are flexible enough to handle these fluctuations. Otherwise, three negative outcomes might arise that substantially increase the economic and environmental costs to the community.

First, a school might be closed and disposed because too few students are using the building (i.e., Disposable School Syndrome).

Second, a school district might be required to build a new school to accommodate an increase in students (i.e., Expensive New School Syndrome), and the expenses to achieve this goal are likely to be substantially higher than building onto an existing school that was planned for expansion from the beginning of its existence.

Third, a school district might unnecessarily decide to build a new school that is large enough to accommodate increases in enrollment in the future (i.e., Oversized New School Syndrome) when they could have built a smaller school that had the capacity to be added onto when the actual increase in enrollment occurs.

Disposable School Syndrome can be avoided by the use of two design techniques. First, the school should be designed so that wings of the building, or different levels of the building, or different stand-alone buildings that comprise the school, can be shut down and re-used for another purpose while enrollment is down. Second, the school should be designed and constructed in a manner that would permit it to be easily adapted and re-used for another purpose. Taller ceilings and fewer structural walls are the key elements to achieving this goal.

Expensive New School Syndrome can be avoided by laying out the school in a manner that permits easy, logical and substantial expansion on the same site. Good site planning is critical for achieving this goal.

Oversized New School Syndrome can be avoided by school layouts that permit easy growth; i.e., principal buildings that can have wings added; additional floors can be added; additional buildings can be added incrementally through a pavilion layout.

Too often, a school district decides to put a band-aid on the problem of growing school enrollment by using poorly designed portable buildings that create an unfavorable learning environment. Portables can be a great interim solution, but only if care is taken in their design (e.g., www.learningcottages.com).

Hurdles

- **Up-Front Costs.** Design techniques that reduce the chance of Disposal School Syndrome or Expensive New School Syndrome are likely to be more expensive than schools that cannot easily grow or contract.
- **Safety Concerns.** Some of the design techniques increase safety concerns for those managing schools. For example, multi-story buildings can cause concerns regarding students who fall down stairs. Concerns are also raised when a multi-building campus requires students to go outside to travel from one building to another.
- **Lack of Trained Designers.** Those responsible for designing the schools might not have been taught techniques designed to enable schools to grow or contract. Thus, a community might require specialized assistance to achieve the desired results.

Examples

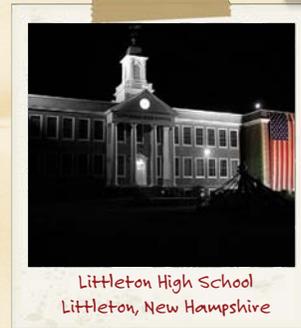
Seaside Middle School - Santa Rosa Beach, Florida

SMART GROWTH SCHOOLS REPORT CARD

9

CONNECTED LEARNING ENVIRONMENT

Does the school connect itself to effective distance learning opportunities; is the school connected to the local community through interaction with local businesses or through a community service program?



A	<p>Substantial Distance Learning, Substantial Interaction with Business Community, and Community Service Program. There is substantial distance learning, the school has substantial interaction with the local business community, and the school has a structured community service program.</p>
B	<p>Substantial Distance Learning, Some Interaction with Community through Business or Community Service Program. There is substantial distance learning, plus the school has some interaction with the local business community or the school has a structured community service program.</p>
C	<p>Substantial Distance Learning and No Interaction; or Some Distance Learning and Some Interaction. There is substantial distance learning and no interaction with the community through business or a community service program; OR there is some distance learning, and some interaction with the community through business or a community service program.</p>
D	<p>Some Distance Learning and No Interaction; or No Distance Learning and Some Interaction. There is some distance learning and no interaction with the community through business or a community service program; OR there is no distance learning and some interaction with the community through business or a community service program.</p>
F	<p>No Distance Learning and No Interaction with Community through Business or Community Service Program. There is no distance learning, there is no interaction with the local business community, and the school does not have a structured community service program.</p>

Connected Learning Environment

Does the school connect itself to effective distance learning opportunities; is the school connected to the local community through interaction with local businesses or through a community service program?

Reasoning

Distance learning offers the chance for schools to offer expertise that it could not otherwise afford due to staffing limitations. In effect, a high quality distance learning program permits a small school to enjoy the benefits of a large school. This permits schools to be smaller and more neighborhood focused (instead of following the 1970's mega-school approach to school design which did not take into account the possibility of distance learning).

It is important for schools to establish connections to the local business community because it can generate additional support for the school district from businesses and citizens who do not have school-aged children. Connections can spring from ongoing formal programs between the school and specific businesses. The nature of these programs is only limited by the creativity of the school and the business community.

Community service programs deliver similar benefits; i.e., increased interaction with the community helps build support for the school from those who do not have school-aged children.

Note that similar benefits associated with connectivity to the greater community can also be achieved from active alumni associations that provide additional support to schools.

Hurdles

- **Cost.** All three of these programs require extra time, money or effort.
- **Local Champions.** Establishing connections to the local community through interaction with local businesses requires teachers and business professionals to serve as champions for the program. Absent the champions, these programs tend to die off.

Examples

Martin Luther King, Jr. Middle School/Edible Schoolyard – Berkeley, California
Littleton High School -- Littleton, New Hampshire (interaction w/business community)

SMART GROWTH SCHOOLS REPORT CARD

10

COMMUNITY PRIDE IN THE DESIGN

Is the school designed so that it generates community pride as measured by a Visual Preference Survey (VPS)?



A	7 to 10. Proposed school receives a positive 7 or higher on a VPS which is scaled from negative 10 to positive 10.
B	4 to 6. Proposed school receives a positive 4, 5 or 6 on a VPS which is scaled from negative 10 to positive 10.
C	1 to 3. Proposed school receives a positive 1, 2 or 3 on a VPS which is scaled from negative 10 to positive 10.
D	0. Proposed school receives a 0 on a VPS which is scaled from negative 10 to positive 10.
F	Negative. Proposed school receives a negative score on a VPS which is scaled from negative 10 to positive 10.



Community Pride in the Design

Is the school designed so it generates community pride measured by a Visual Preference Survey (VPS)?

Reasoning

A building that is loved is likely to be cared for, refurbished, renovated and re-used over time. A building that is not loved is likely to be abandoned and disposed.

Since schools are built with taxpayer money, schools should not be built if they are likely to be abandoned and disposed. In other words, it is not wise to invest public dollars into buildings that are not likely to serve the community for more than a generation or two when we have the capability and resources to invest in buildings that will serve our communities for a much longer period of time.

Over the past 30 years, many schools have been built that generate a negligible amount of community pride--- perhaps on par with a jail or muffler shop. Instead of being renovated, many of these schools are disposed---- at substantial economic and environmental cost.

One way to help prevent these unnecessary outcomes is to have the designs of proposed new schools subjected to a VPS that gauges community pride in the design. The basic idea is that if the VPS indicates insufficient community pride in the proposed design, the designers should go back to the drawing board until they can produce a design that generates strong support from the community.

A VPS allows individuals to rate images based upon a scale of negative 10 to positive 10. The individuals are given a brief period of time to rate the image (perhaps no more than 5 seconds to 10 seconds) before being required to rate another image. The grading system for this issue makes it clear that any proposed school that receives an overall negative score should not be built.

The value of a beautifully designed school goes beyond the longevity of the building. It can also help build support for the school system from individuals who do not have school-aged children.

Hurdles

- **Cost of conducting VPS.** Conducting a VPS obviously costs more time and money than not conducting a VPS. School districts should simply view these costs as part of the cost of design since they have the potential to save the school district a substantial amount of money over time.
- **Value Engineering.** Too often elements that are designed to add great distinction to a school are removed from consideration during the construction review process based upon the belief that they are unnecessary and frivolous. This is short-sighted. Our forefathers were able to produce buildings worthy of postcards with fewer resources because they knew the important tangible benefits of building schools that would generate enormous community pride.
- **Misguided Notion that Beauty in School Design is Subjective.** Many people mistakenly believe that beauty is in the eye of the beholder, and therefore a VPS which largely measures beauty should not be considered a valuable tool. The extensive history of the VPS reveals that communities do reach an amazing level of consensus regarding these issues.
- **Lack of Trained Designers.** Those responsible for designing the schools might not have been taught the architectural patterns that result in widespread community support for their designs. Thus, a community might require specialized assistance to achieve the desired results.

SMART GROWTH SCHOOLS REPORT CARD

11

HIGH-PERFORMANCE GREEN BUILDING CERTIFICATION

Does the construction or renovation of the school follow best practices regarding energy efficiency, water efficiency, indoor air quality, daylighting, light pollution and earth-friendly construction techniques as set out in the LEED for Schools or similar high-performance building certification program?

A	Platinum Certification. School building receives LEED for Schools Platinum certification.
B	Gold Certification. School building receives LEED for Schools Gold certification.
C	Silver Certification. School building receives LEED for Schools Silver certification.
D	Certification. School building receives LEED for Schools certification.
F	No Certification. School building does not receive LEED for Schools certification.



High-Performance Green Building Certification

Does the construction or renovation of the school follow best practices regarding energy efficiency, water efficiency, indoor air quality, daylighting, light pollution and earth-friendly construction techniques as set out in the LEED for Schools or similar high-performance building certification program?

Reasoning

Incorporating high-performance green building techniques typically costs a little more up front, but it produces a wide range of long-term benefits that easily outweigh the upfront costs.

First, energy and water efficiency savings can produce substantially lower operational costs--- typically a minimum of 30%.

Second, better indoor air quality, more natural light, and better acoustics have all proven to increase both student and teacher productivity and retention.

Third, innovative design and construction can also produce a living laboratory of learning opportunities in areas such as renewable energy generation, water and resource conservation, green technologies and agricultural urbanism.

Beyond certification programs, existing schools can simply incorporate many of these ideas into a Conservation and Health Plan after conducting a comprehensive energy and health audit.

Note that these techniques are important, but they are insufficient to produce a truly green and healthy school by themselves because they do not adequately consider how walkable or bikable a school is. In other words, if every student must use a car or a bus to reach a school, the amount energy used pursuant to transportation is likely to dwarf the amount of energy savings attributable to the building.

At the same time, note that it is generally better from an environmental perspective for a community to re-use an existing building--- no matter what its current use--- than construct a building from scratch. Thus, communities should consider adaptively re-using an existing building prior to assuming that a new building is necessary.

Finally, consider incorporating the low-tech green technologies embodied by the "Original Green" (www.orginalgreen.org) such as durable construction methods, a beautiful design so that it is loved and cared for over time, and a flexible layout so that it can adjust to changing needs over time.

Hurdles

- **Initial Cost.** While building a LEED certified school is likely to save the school district a substantial amount of operational costs over time, the school district is likely to face increased initial costs for compliance with the program. Studies suggest that high-performance schools cost an average of 2% more than conventional schools.

Examples

Prairie Crossing Charter School, Grayslake, Illinois.

Clackamas High School, Clackamas, Oregon.

SMART GROWTH SCHOOLS REPORT CARD

SCHOOL

DATE

EVALUATION CRITERIA SUMMARY		GRADE
1	FULL COST ANALYSIS. Will old schools be restored rather than replaced so long as the cost is less than a new school?	
2	HOLISTIC PLANNING. Is school planning done in conjunction with land planning and transportation planning or are these segregated?	
3	COMMUNITY BUY-IN. Is the school planning process designed in a way to secure meaningful community input prior to key decisions being made?	
4	ELIMINATION OF DESIGN CONSTRAINTS. Do you have the flexibility to design the school efficiently for the site and the community?	
5	NEIGHBORHOOD SCHOOL. Is the school embedded into a walkable neighborhood so that most students can reach it safely without the necessity of a car or bus?	
6	PROMINENT SITE. Is the school sited in a prominent location so that it communicates the importance the school has in the culture of the community?	
7	SHARED USE. Is the school sited or designed so that it can share uses with the community?	
8	FLEXIBILITY. Is the school designed so that it can grow or contract in size and services as the neighborhood grows or contracts so that it remains useful over a longer period of time?	
9	CONNECTED LEARNING ENVIRONMENT. Does the school connect itself to effective distance learning opportunities; is the school connected to the local community through interaction with local businesses or through a community service program?	
10	COMMUNITY PRIDE IN DESIGN. Is the school designed so that it generates community pride as measured by a Visual Preference Survey (VPS)?	
11	HIGH PERFORMANCE GREEN BUILDING CERTIFICATION. Does the construction or renovation of the school follow best practices regarding energy efficiency, water efficiency, indoor air quality, daylighting, light pollution and earth-friendly construction techniques as set out in the LEED for Schools or similar high-performance building certification program?	
OVERALL AVERAGE		