EPA Smart School Siting Tool:
A new tool for engaging community stakeholders in smart school siting decisions

New Partners for Smart Growth Conference
Portland, Oregon
February 11, 2016
Regina Langton
Senior Policy Analyst
U.S. EPA
Office of Sustainable Communities
(202) 566-2178
langton.regina@epa.gov

Bill Michaud, ENV SP
Senior Technical Advisor
SRA International, A CSRA Company
(860) 738-7501
bill.michaud@csra.com

Rebecca Stuecker, AIA, LEED AP
Architect
Dull Olson Weeks – IBI Group Architects
(503) 226-6950
rebecca.stuecker@IBIGroup.com

Katherine Moore, AICP
Sustainable Growth Program Director
Georgia Conservancy
(404) 876-2900 X106
kmoore@gaconservancy.org

Nick Salmon
President
Collaborative Learning Network, LLC
406.529.5192
nicksalmon@collaborativelearningnetwork.com
Agenda

1) Overview of Smart School Siting Tool
2) Case Studies
3) Interactive Demonstration
School Siting Guidelines

- Meaningful community involvement
- Health, safety and environmental evaluation
- Opportunities to promote environmental justice
- Renovation, upgrade, adaptation and expansion
- Possible sites in overburdened communities
- Multi-modal, active transportation options
- Schools as community hubs
- Comprehensive assessment of costs

www.epa.gov/schools/school-siting-guidelines

Training Modules

- 1-hour and 3-hour professional training modules
- Parent/community modules

georgiaconservancy.org/schoolsitting
The tool is designed to...

- Engage a more diverse group of stakeholders
- Encourage more holistic analysis of opportunities and impacts
- Foster and facilitate collaboration
- Support (not supplant) community decision-making
Smart School Siting Tool Overview

Available at:
http://www.epa.gov/smartgrowth/smart-school-siting-tool

School Siting Timeline

<table>
<thead>
<tr>
<th>Prepare</th>
<th>Identify need</th>
<th>Evaluate options</th>
<th>Select site</th>
</tr>
</thead>
</table>

Assessment & Planning Workbook
Resource to help communities prepare for siting decisions by assessing coordination between school siting and other planning processes

Site Comparison Workbook
Resource to help communities compare and evaluate school siting alternatives, including renovation, expansion, and new construction

User Guide
- Background on smart school siting
- Overview of the Smart School Siting Tool
- How to use the Workbooks
- Glossary and resources

Prepare
Identify need
Evaluate options
Select site
Design:
- User-friendly downloadable Excel file
- Three assessment sections with ~200 closed (“select one”) questions, with space for comments
- Summary, priority-setting, and action planning worksheets

Assessment areas:
- Coordination between school and community plans and codes
- Alignment of school siting criteria and community planning priorities
- Coordination between school siting and community planning processes
**Design:**

- User-friendly downloadable Excel file
- Site summary sheet, 5 worksheets with 25 multiple choice questions, and two cost calculators
- High-level and detailed summary sheets

**Site comparison factors:**

- Proximity to students and population centers
- Location in the community
- Beneficial site characteristics
- Connectivity with the neighborhood
- Bike and pedestrian accessibility
- One-time capital and recurring annual costs
Putting it into Action…
Forming the Stakeholder Group
Putting it into Action…
Smart School Siting Workshops

Planning & Assessment Workshop
*Workbook-facilitated…*
- Collaborative assessment
- Facilitated prioritization exercise
- Action planning
- Monitoring agreements

Site Comparison Workshop
*Workbook-facilitated…*
- Open-ended priority-setting exercise
- Collaborative site assessment
- Facilitated comparative site evaluation
First Steps

- Enrollment forecast linked to Census data and local economic conditions
- GIS mapping of students and schools
- Facility condition/capacity
- Optimal school size
- Community engagement plan
Case Studies Part 1

• Planning for Schools in Oregon
• Rosa Parks Elementary
Oregon Schools – How We Got Here

- 1990 – Measure 5
- 2007 – SB 1036: Construction Excise Tax
- 2013 – SB 540: Task Force on School Capital Improvement Planning
- 2015 – SB 447: Matching Funds Grant

*Information obtained directly from the laws or measures cited as well as the 2009 report by the The Center For Innovative School Facilities*
Case Studies
Planning Schools in Oregon

How The Planning Assessment Tool Can Help

• Long-Range Facilities Master Plan & City Comprehensive Plan
• Transportation
• School Siting Criteria & Selecting a Site
• Communicating with Community Planning Policies
• Communicating With Stakeholder Groups
Rosa Parks Elementary – Doing It Right

- Housing Authority of Portland
- New Columbia
- A Community Campus
- Partners – Boys & Girls Club, Portland Parks & Rec.
- The “Whole Child” Approach
Case Studies
Rosa Parks Elementary
Case Studies
Rosa Parks Elementary

Rosa Parks Elementary

1. Sun Dial / Compass
2. Stormwater Retention & Discharge Feature
   (all stormwater remains on site)
3. PV Panels
4. Heritage Trees
5. Draught-Resistant Planting
6. Combination Hardsurface
   Play & Drop Off
7. Recycling Center
How Can The Tool Be Used to Get Us There?

• Who will fill out the tool and how?
  • Must be a joint effort that engages district leaders and planning consultants
• Asking the right questions.
  • Form a planning committee
  • Find Partners
  • Coordinate with the Local Government
  • Communicate with Stakeholders
Case Studies Part 2

- Franklin – Wrong School/Right Location
- Cold Springs – Build Where?
- Anaconda – School Consolidation
FRANKLIN
Right Location/
Wrong School

Expanded 5 times in 99 years
Rapidly Changing/Infill Neighborhood
Use of Existing Street Network
Rebuild New Elementary on Existing Site

- Neighborhood is well defined by 4 major streets, resulting in less than ½ mile walk to school
- Proximity to city bus service
- Reinvestment in low SES neighborhood
- Two story school uses 0.5 acre, remaining 1.5 acres of open space
- Cost savings associated with existing utilities
- Utilize existing streets for pick-up/drop-off, parking
- Community-based team advocated for alternative that reflected their values
Cold Springs
Build Where?

Criteria:
- Site Size/Slope/Site Access
- Proximity to Existing Schools/Homes
- Neighborhood Amenities (trails, parks, crosswalks, etc)
- Urban Growth Boundary/Site Utilities
- Orientation
- Hazards
- Timing
Lower Miller Creek:
Flat Site
Adjacent dense development
Within Urban Growth Boundary
Awaiting Annexation
Least overlap with adjacent attendance area

Marilyn Park:
Sloping site with no access
Required swap with developed city park
Single neighborhood collector street adjacent
Parking challenges
Overlap with adjacent attendance area

Meriwether:
Large site
Limited access from adjacent street
Major neighborhood collector
Significant overlap with adjacent attendance area
Cold Springs
Case Study
Result

Rebuild New Elementary on New Site (Lower Miller Creek)

- Within Urban Growth Boundary
- Adjacent fire station, future neighborhood commercial
- Adjacent to two established neighborhoods with trails & parks
- Accessible Site
- City master plan anticipates high density when annexed
- Reinforced need for community engagement
ANACONDA School Consolidation

2,000 student decline (60%) in enrollment 1980-2016
Consolidate to PK-8/9-12
6 school sites
## Case Study

### Demonstration

#### Background

- **Busy Highway**
  - **Description**: New school construction
  - **Located at**: 1410 Park Avenue West
  - **Key Characteristics**:
    - Grades to be served: PK-5
    - Planned enrollment: 324
    - Potential re-use for residential/commercial development

- **Proximity**
  - **Description**: School renovation or expansion
  - **Located at**: 506 Dstreet
  - **Key Characteristics**:
    - Grades to be served: 3-5
    - Planned enrollment: 254
    - Access on four adjacent streets
    - Utilizes site

- **Re-use of former school site**
  - **Description**: New school construction
  - **Located at**: West Fifth Street
  - **Key Characteristics**:
    - Grades to be served: PK-5
    - Planned enrollment: 600
    - Access on two adjacent streets
    - Former site of Washington School
    - Large shared parking area

### Site Scores

**Site Scores** (should be compared against the site scores generated for other candidate sites)

<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Overall Score</th>
<th>Score Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

*Incomplete: not all factors scored*

### Estimated Costs

**Estimated Costs**

- **Borne By**
  - Local government
  - Local school agency
  - Developers
  - Households

*Incomplete: not all cost information available*
**Anaconda Case Study**

**District Admin Option** (Busy Highway)

### Summary

**Building & Grounds Planning, Anaconda School District #10**

#### District Administration/PK/VOED

- **New school construction**
- 1410 Park Avenue West

#### Description

- Grades to be served: PK-5
- Planned enrollment: 532

- **Key Characteristics**
  - Existing School Site
  - Access to Highway 1
  - Potential re-use for residential/commercial development

#### Site Scores

* (should be compared against the site scores generated for other candidate sites)

<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Proximity to Students and Population Centers</td>
<td>30</td>
</tr>
<tr>
<td>3 Location in the Community</td>
<td>96</td>
</tr>
<tr>
<td>4 Site Characteristics</td>
<td>18</td>
</tr>
<tr>
<td>5 Connectivity with the Neighborhood</td>
<td>4</td>
</tr>
<tr>
<td>6 Bike and Pedestrian Accessibility</td>
<td>40</td>
</tr>
</tbody>
</table>

*Incomplete: not all factors scored

#### Assessment

- Highway isolates school from most neighborhoods
- Could sell property (location better for commercial use)

[Link to completed Site Comparison Workbook]
### Summary

**Building & Grounds Planning, Anaconda School District #10**

### Lincoln Elementary School

- School renovation or expansion
- 506 Chestnut

<table>
<thead>
<tr>
<th>Description</th>
<th>Key Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades to be served:</td>
<td>3-5</td>
</tr>
<tr>
<td>Planned enrollment:</td>
<td>254</td>
</tr>
</tbody>
</table>

- Existing School Site
- Access on four adjacent streets
- Utilities bisect site
- 

#### Site Scores (should be compared against the site scores generated for other candidate sites)

<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Overall Score</th>
<th>Score Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Proximity to Students and Population Centers</td>
<td>96</td>
<td>![Score Profile]</td>
</tr>
<tr>
<td>2 Location in the Community</td>
<td>84</td>
<td>![Score Profile]</td>
</tr>
<tr>
<td>4 Site Characteristics</td>
<td>75</td>
<td>![Score Profile]</td>
</tr>
<tr>
<td>5 Connectivity with the Neighborhood</td>
<td>66</td>
<td>![Score Profile]</td>
</tr>
<tr>
<td>6 Bike and Pedestrian Accessibility</td>
<td>46</td>
<td>![Score Profile]</td>
</tr>
</tbody>
</table>

*Incomplete: not all factors scored

### Assessment

- Strong proximity, **but**...
- Small site with no open space
- Bisected by utilities
- Pick-up/drop-off challenges
- Parking challenges

[Link to completed Site Comparison Workbook]
Anaconda Case Study
Mitchell Stadium Option (Reuse of former school site)

Assessment
- Re-use of brownfield site
- Re-develop former school site
- Shared use between School/City
- Large site with PK-12 opportunities
- Average scores throughout

Link to completed Site Comparison Workbook
Rebuild New Elementary on Former School Site

- Community dialogue regarding values and worksheet results
- Middle of community (less than 1 mile walk)
- Two adjacent streets for access
- Share parking with football/soccer/softball/track & field
- Re-developed brownfield
- Water, sewer, power & data on site
- Sell Administration site for commercial development
- Sell Dwyer to city to expand park
- Sell Lincoln to Head Start/Boys & Girls, retain use of gym
- Revitalize downtown high school facility
1) Example Scenario

2) Open-Ended School Siting Process

3) Smart School Siting Tool-Facilitated Process
   • Priority-setting
   • Collaborative site assessment
   • Facilitated site comparison process
The Need:
The existing elementary school has exceeded its useful life
• Not a healthy learning environment
• Too small for ballfields and other recreation

The Alternatives:
The school board’s siting committee has identified two options

Option A: Build a new school on donated land
• A developer has offered to donate 30 acres of existing farm land to the community with approval of a new housing development

Option B: Renovate the existing school
• Demolish the interior and abate hazards; rebuild as a high performing school
• Identify alternatives to balance on-site recreation and other needs (e.g., parking)
Elementary School Siting
Alternatives

**Option A:** Build New School on Donated Land

**Option B:** Renovate Existing School

Demonstration Example Scenario
**High-Level Summary of Alternatives**

<table>
<thead>
<tr>
<th></th>
<th>Option A: Build New School</th>
<th>Option B: Renovate Existing School</th>
</tr>
</thead>
<tbody>
<tr>
<td>General description</td>
<td>Build new school on 30 acres to be donated by developer</td>
<td>Renovate existing school; identify alternatives for on-site recreation</td>
</tr>
<tr>
<td>Cost Estimate</td>
<td>$30M (includes site preparation, new construction of building and grounds)</td>
<td>$35M (includes building renovation, other site construction costs, temporary facilities for students)</td>
</tr>
<tr>
<td>Pros</td>
<td>• Plenty of room for ballfields, parking, etc.</td>
<td>• Preserve the “old school” in the downtown</td>
</tr>
<tr>
<td></td>
<td>• No land acquisition costs</td>
<td>• No land acquisition costs</td>
</tr>
<tr>
<td></td>
<td>• Nice setting</td>
<td>• Close to kids</td>
</tr>
<tr>
<td></td>
<td>• Will serve the new development</td>
<td></td>
</tr>
<tr>
<td>Cons</td>
<td>• Hard to get there</td>
<td>• Complicated construction, could be disruptive for downtown</td>
</tr>
<tr>
<td></td>
<td>• Close to the highway</td>
<td>• Not enough room for ballfields</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Temporary classrooms</td>
</tr>
</tbody>
</table>
Demonstration
Open-Ended Siting Decision
(Group Discussion)

- Which option would you prefer?
- Would others in your community agree?
- Why or why not?
- What more would you like to know?
- Who else should be involved in this decision?
- Is the path forward clear?
Reset...

- What are the most important things to consider in this decision?
- What information do we need to gather?
- Who should be involved in this decision?
- How are we going to weigh the pros and cons?
- How are we going to account for differences in opinion?

**Smart School Siting approach:**

- Engage a representative group of stakeholders
- Establish priorities up front
- Use the Smart School Siting Tool to organize information
- Weigh alternatives using objective information and stakeholder-defined priorities
### Setting Priorities (Group Exercise and Discussion)

<table>
<thead>
<tr>
<th>What factors should we consider?</th>
<th>Y/N</th>
<th>What factors are most important?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity to existing students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to accommodate classroom and other facility needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential for shared use of school and community facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency with community plans for development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions to neighborhood quality of life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian accessibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bike accessibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal disruption to educational environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal disruption to downtown traffic and commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indoor air quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing utilities capacity and condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing road capacity and condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall initial capital costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall recurring annual costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using the Smart School Siting Tool to...

- Gather information
- Organize information
- Compare siting alternatives
- Generate and add to the discussion

Completing the Tool

- Next Slide
- Handout

Comparing the options

- What differences does the Smart School Siting Tool highlight?
- What other information should we consider?
- What does the priority-setting exercise tell us?
### Site Comparison

**Demonstration**

**Comparing Options**

*(Group Exercise and Discussion)*

---

#### SUMMARY REPORT

**Project Name:** Central School District

**School District:** Central School District

**Site Name:** Option A: Build New School

**Site Location:** Old Farm Road

**Construction Type:** New school construction

**Description**

- Grades to be served: PK-6
- Planned enrollment: 500

**Key Characteristics**

- Land to be donated to District
- Plenty of room for ballfields
- Nice setting
- Will serve new development

---

#### Site Scores

(should be compared against the site scores generated for other candidate sites)

<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Overall Score</th>
<th>Score Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proximity to Students and Population Centers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2. Location in the Community</td>
<td>-20</td>
<td></td>
</tr>
<tr>
<td>3. Beneficial Site Characteristics</td>
<td>-4</td>
<td></td>
</tr>
<tr>
<td>4. Connectivity with the Neighborhood</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>5. Bike and Pedestrian Accessibility</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

---

#### Estimated Costs

<table>
<thead>
<tr>
<th>Borne By</th>
<th>One-time Capital Cost</th>
<th>Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government</td>
<td>$3,400,000</td>
<td>$0</td>
</tr>
<tr>
<td>Local school agency</td>
<td>$30,000,000</td>
<td>$210,000</td>
</tr>
<tr>
<td>Developers</td>
<td>$200,000</td>
<td>$0</td>
</tr>
<tr>
<td>Households</td>
<td>$82,000</td>
<td></td>
</tr>
</tbody>
</table>

*Incomplete: not all cost information available

---

#### SUMMARY REPORT

**Project Name:** Central School District

**School District:** Central School District

**Site Name:** Option B: Renovate Existing School

**Site Location:** Main Street

**Construction Type:** School renovation or expansion

**Description**

- Grades to be served: PK-6
- Planned enrollment: 500

**Key Characteristics**

- Reuse existing site owned by the District
- Close to students
- Preserves the "old school" downtown

---

#### Site Scores

(should be compared against the site scores generated for other candidate sites)

<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Overall Score</th>
<th>Score Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proximity to Students and Population Centers</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>2. Location in the Community</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>3. Beneficial Site Characteristics</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>4. Connectivity with the Neighborhood</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>5. Bike and Pedestrian Accessibility</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

---

#### Estimated Costs

<table>
<thead>
<tr>
<th>Borne By</th>
<th>One-time Capital Cost</th>
<th>Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government</td>
<td>$320,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Local school agency</td>
<td>$36,000,000</td>
<td>$176,000</td>
</tr>
<tr>
<td>Developers</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Households</td>
<td>$25,000</td>
<td></td>
</tr>
</tbody>
</table>

*Incomplete: not all cost information available
The tool...
- Identifies opportunities and reasons to collaborate
- Includes questions of interest to different stakeholders
- Helps organize and synthesize information
- Helps focus dialogue and facilitate collaboration

To...
- Engage a more diverse group of stakeholders
- Encourage more holistic analysis of opportunities and impacts
- Foster and facilitate collaboration
- Support (not supplant) community decision-making
Next Steps

Disseminate
- Tool available on EPA’s Smart Growth website
- Spread the word (webinars, conferences)
- Engage partners nationwide (e.g., state and local school siting decision-makers, educational facility planners, professional associations)

Pilot the Tool
- Test workbooks
- Test workshop templates
- Capture case studies

Refine and Support
- Refine the workbooks
- Refine the templates
- Update the User Guide with real world case studies
The Smart School Siting Tool is available at:
http://www.epa.gov/smartgrowth/smart-school-siting-tool

For more information, please contact:
Regina Langton
EPA Office of Sustainable Communities
(202) 566-2178
langton.regina@epa.gov