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

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Today's Presenters

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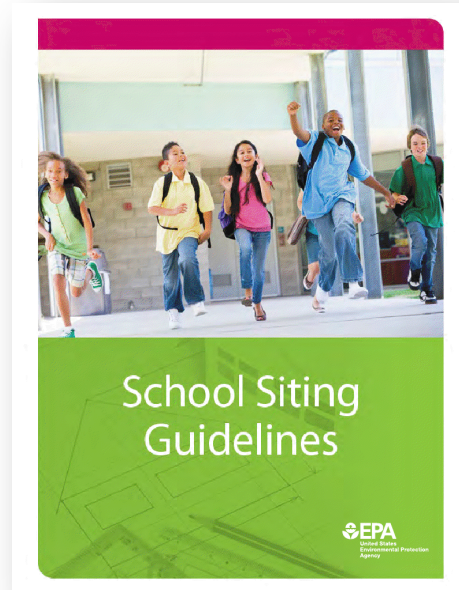kmoore@gaconservancy.org

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Agenda

1) Overview of Smart School Siting Tool

2) Case Studies

3) Interactive Demonstration

Background
Guidelines and Training

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/schoolsiting

Smart School Siting Tool
Key Objectives

The tool is designed to...

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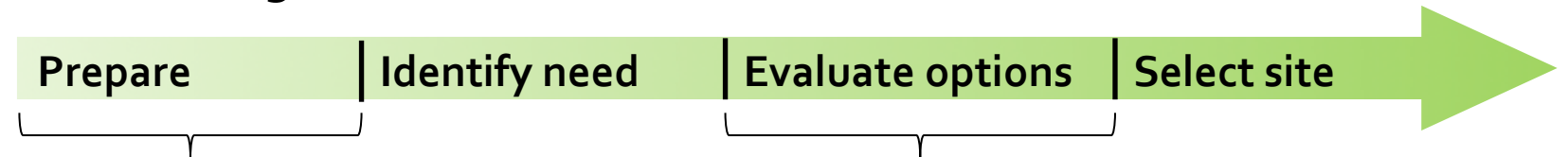- Support (not supplant) community decision-making

Smart School Siting Tool Overview

Available at:

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

School Siting Timeline

Prepare	Identify need	Evaluate options	Select site

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
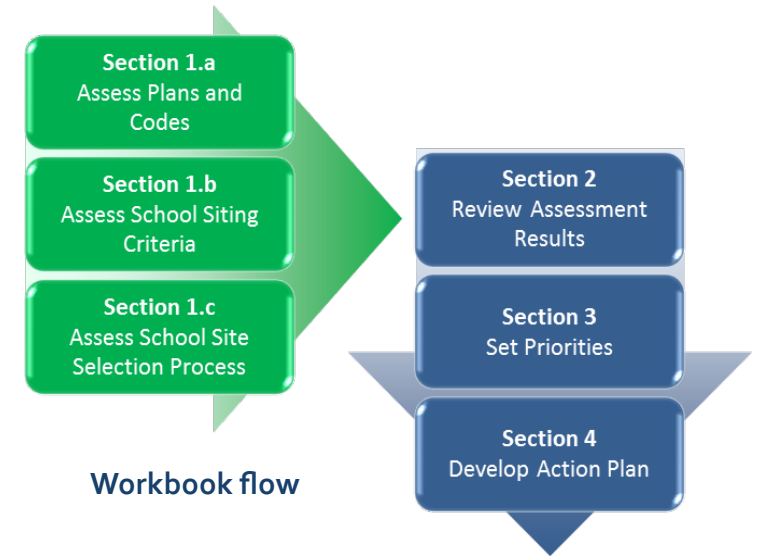
User Guide

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

Smart School Siting Tool
Assessment & Planning Workbook

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

Section 1.a Assess Plans and Codes

Section 1.b Assess School Siting Criteria

Section 1.c Assess School Site Selection Process

Section 2 Review Assessment Results

Section 3 Set Priorities

Section 4 Develop Action Plan

Workbook flow

Yes | To some extent | Unclear | No | Not Applicable | Answer Later

Answer choices

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*

Smart School Siting Tool
Site Comparison Workbook

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

Workbook navigation aid

Typical question format

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

School Siting Committee

- School Board
- Stakeholders
- Local Govt.
- Elected Officials
- Parents
- Planners
- Admin
- Teachers & Staff
- Engineering
- Facility Staff
- Students
- Parks & Rec.
- Nonprofit Groups

Georgia Conservancy
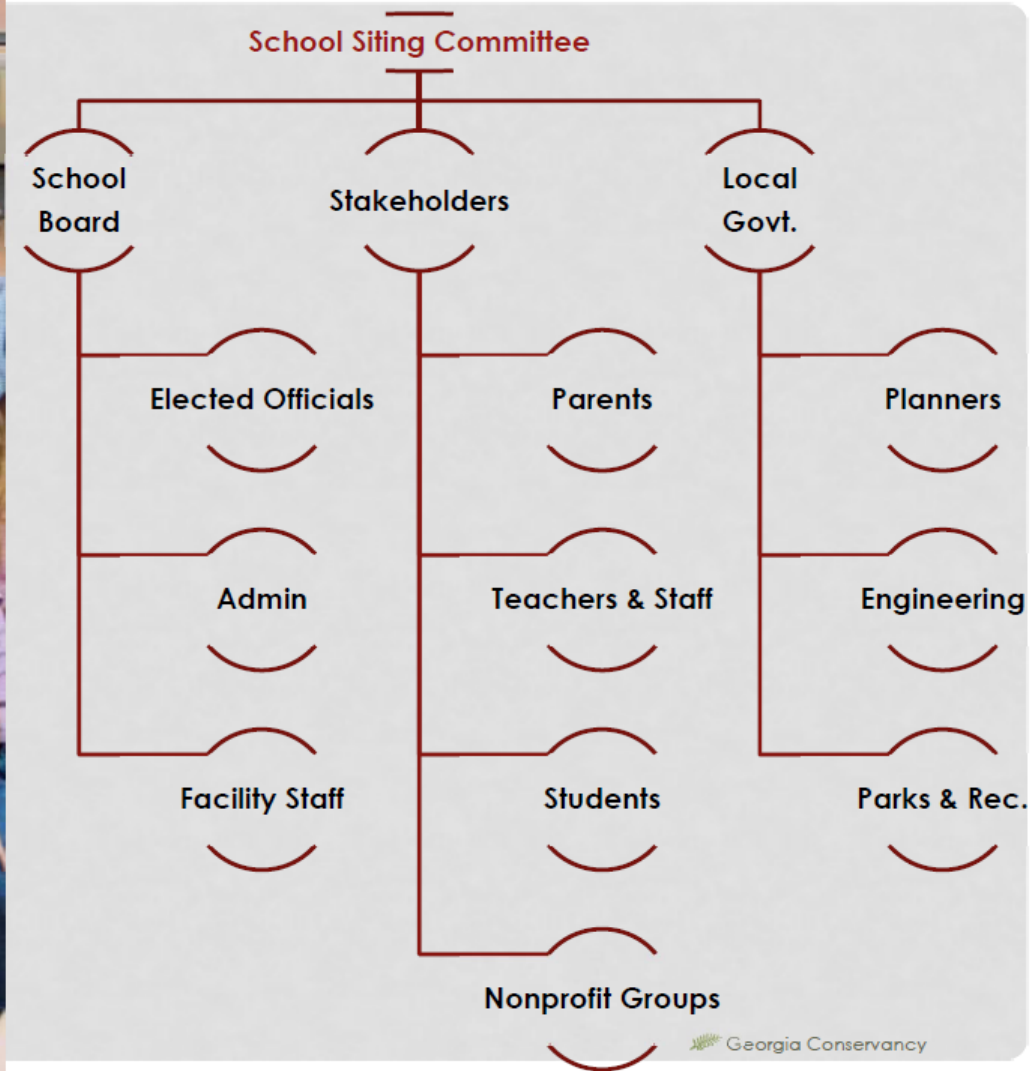
Putting it into Action…
Smart School Siting Workshops

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

Putting it into Action… Getting Prepared

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
Smart School Siting Tool

Case Studies Part 1

- Planning for Schools in Oregon
- Rosa Parks Elementary

Case Studies
Planning Schools In Oregon

Oregon Schools – How We Got Here

- 1990 – Measure 5
- 2007 – ORS 195.110: School Facilities Plan
- 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

Case Studies
Rosa Parks Elementary

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

New Columbia

Case Studies
Rosa Parks Elementary

Housing

New 4 Acre Park

Boys & Girls Club

UPCC

Future Commercial

Housing

Community Campus

Elementary School

Rosa Parks Elementary

Case Studies
Rosa Parks Elementary

NEW BOYS & GIRLS CLUB

SHARED USE

NEW ROSA PARKS ELEMENTARY SCHOOL

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
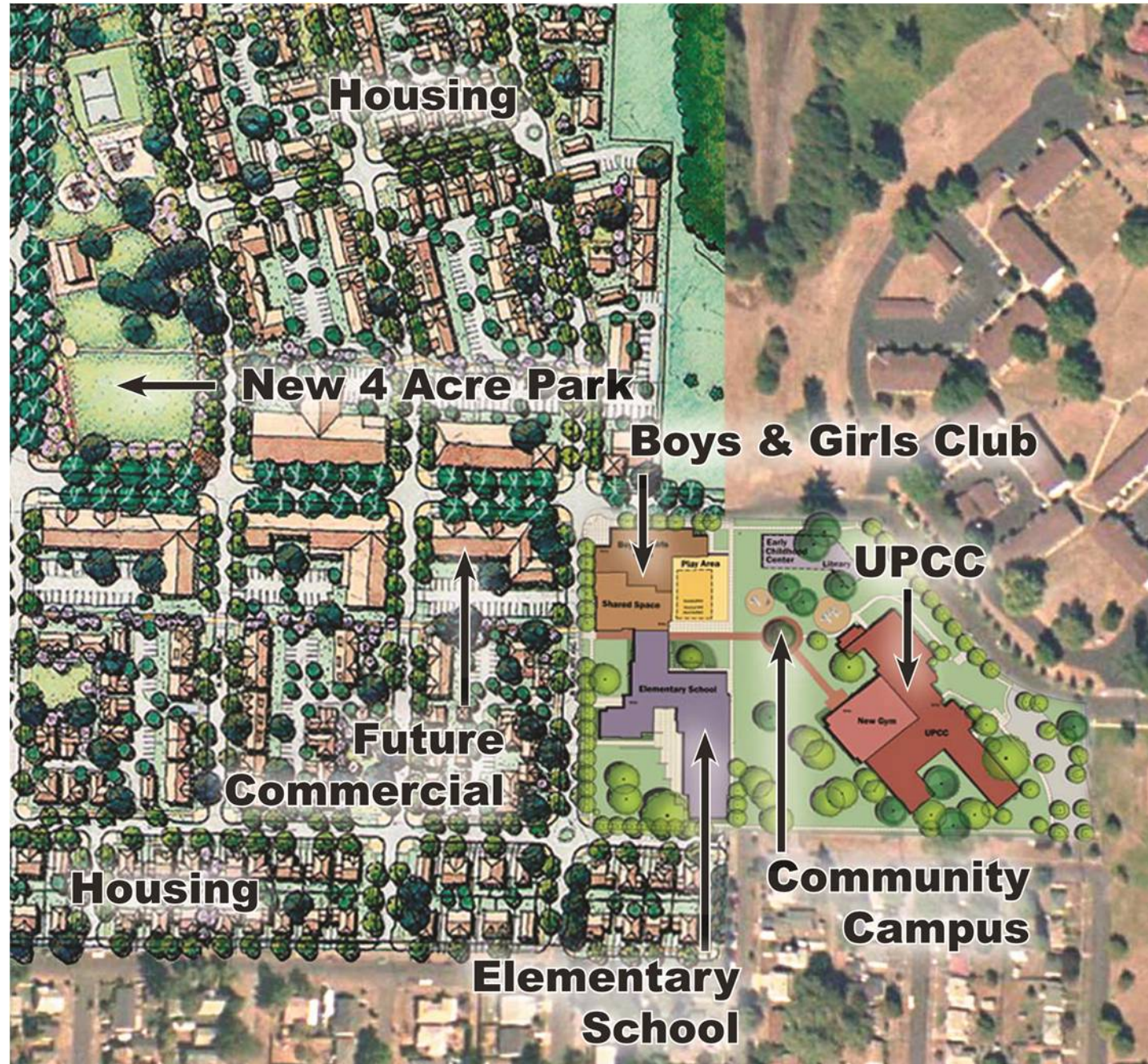
Case Studies
Oregon Schools

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
Site Comparison Workbook

Case Studies Part 2

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

FRANK R Location/ Wrong School

Expanded 5 times in 99 years

Rapidly Changing/Infill Neighborhood

Use of Existing Street Network

Franklin Case Study
Result

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

Existing School Sites

Lower Miller Creek Site
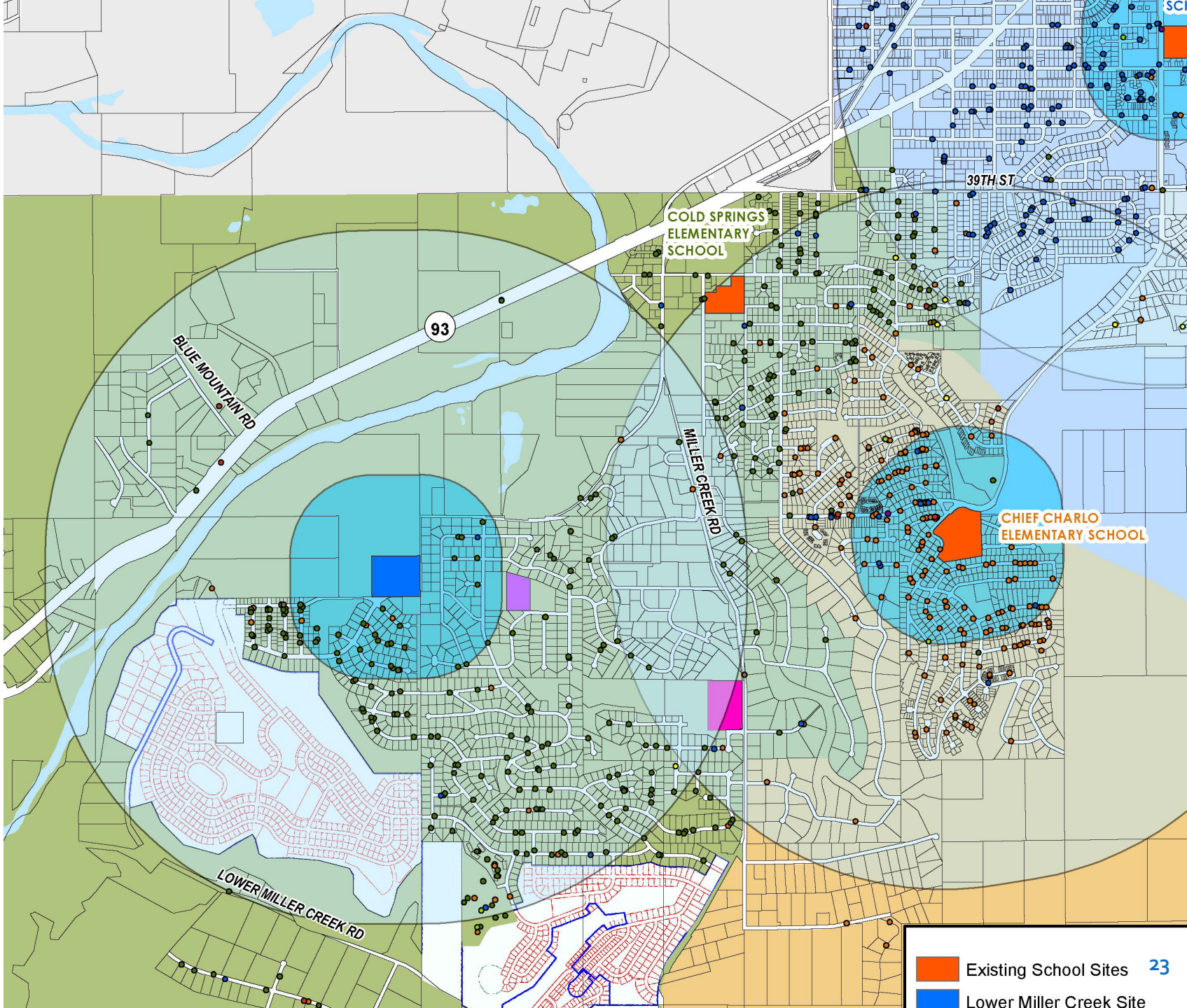
Cold Springs Case Study
Result

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
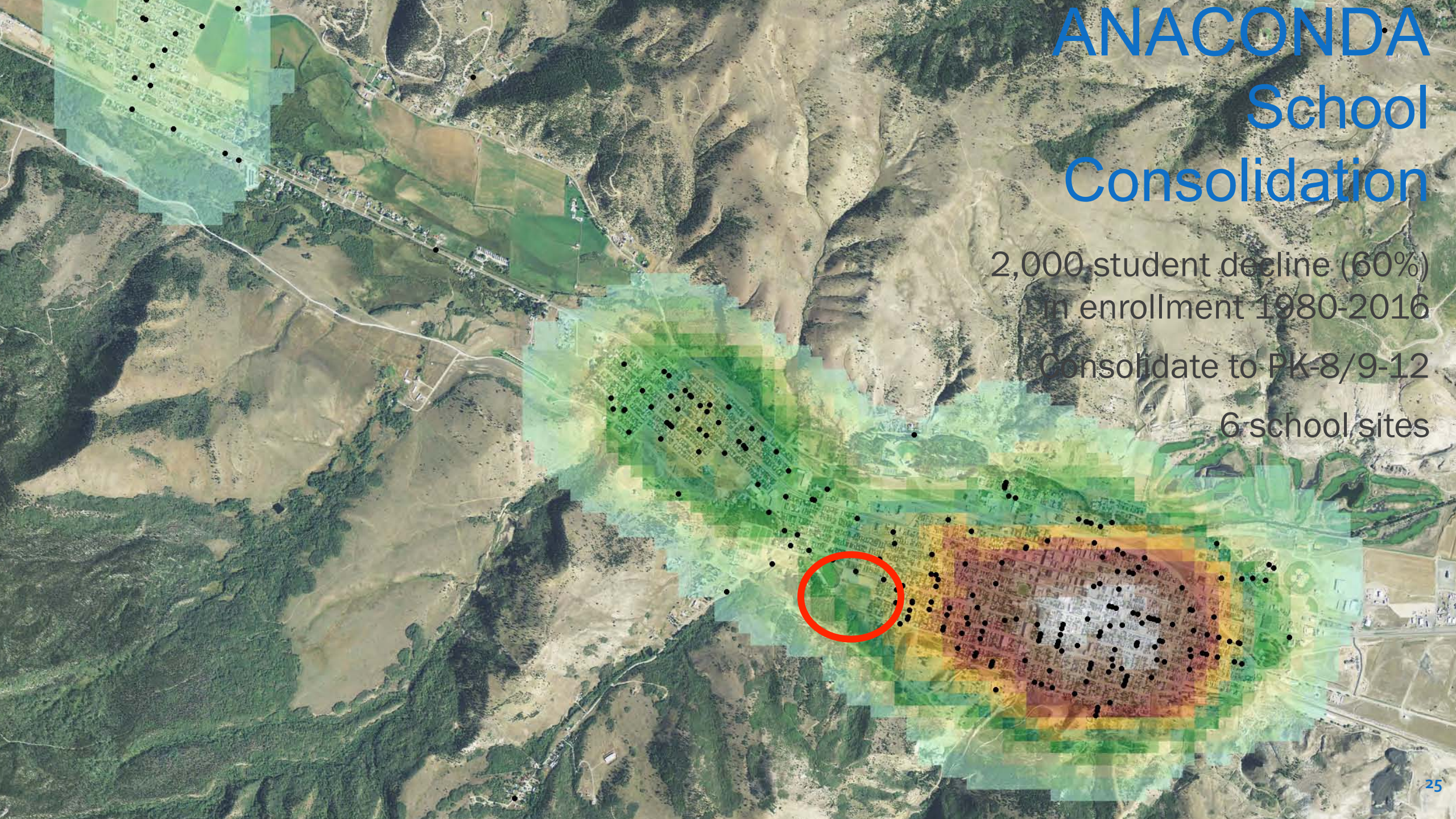
Busy Highway   Proximity   Re-use of former school site

Busy Highway

Smart School Siting Tool: Site Comparison Workbook

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)*

	Worksheet	Overall Score
2	Proximity to Students and Population Centers	30
3	Location in the Community	96
4	Site Characteristics	18
5	Connectivity with the Neighborhood	4
6	Bike and Pedestrian Accessibility	40

Score Profile

* Incomplete: not all factors scored

Estimated Costs

Borne By	One-time Capital Cost	Annual Cost
Local government		
Local school agency		
Developers		
Households		

* Incomplete: not all cost information available

Proximity

Smart School Siting Tool: Site Comparison Workbook

SUMMARY

Building & Grounds Planning, Anaconda School District #10

Lincoln Elementary School
School renovation or expansion
506 Chestnut

Description
Grades to be served:	3-5
Planned enrollment:	254

Key Characteristics
- 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)*

	Worksheet	Overall Score
2	Proximity to Students and Population Centers	96
3	Location in the Community	84
4	Site Characteristics	75
5	Connectivity with the Neighborhood	66
6	Bike and Pedestrian Accessibility	46

Score Profile

* Incomplete: not all factors scored

Estimated Costs

Borne By	One-time Capital Cost	Annual Cost
Local government		
Local school agency		
Developers		
Households		

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Re-use of former school site

Smart School Siting Tool: Site Comparison Workbook

SUMMARY

Building & Grounds Planning, Anaconda School District #10

Mitchell Stadium
New school construction
West Fifth Street

Description
Grades to be served:	PK-5
Planned enrollment:	600

Key Characteristics
- Largest school site
- Access on two adjacent streets
- former site of Washington School
- Large shared parking area
-

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

	Worksheet	Overall Score
2	Proximity to Students and Population Centers	42
3	Location in the Community	60
4	Site Characteristics	36
5	Connectivity with the Neighborhood	35
6	Bike and Pedestrian Accessibility	40

Score Profile

* Incomplete: not all factors scored

Estimated Costs

Borne By	One-time Capital Cost	Annual Cost
Local government		
Local school agency		
Developers		
Households		

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Anaconda Case Study
District Admin Option
(Busy Highway)

Smart School Siting Tool: Site Comparison Workbook

SUMMARY

Building & Grounds Planning, Anaconda School District #10

District Administration/PK/VOED
New school construction
1410 Park Avenue West

Description		Key Characteristics
Grades to be served:	PK-5	● Existing School Site
Planned enrollment:	532	● Access to Highway 1
		● Potential re-use for residential/commercial development
		●
		●

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* 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

Anaconda Case Study
Lincoln Elementary Option
(Proximity to students)

Smart School Siting Tool: Site Comparison Workbook

SUMMARY

Building & Grounds Planning, Anaconda School District #10

Lincoln Elementary School
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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)

Smart School Siting Tool: Site Comparison Workbook

SUMMARY

Building & Grounds Planning, Anaconda School District #10

Mitchell Stadium
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Description

Grades to be served: PK-5
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Key Characteristics
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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

Anaconda Case Study
Result

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

Demonstration
Site Comparison Workshop

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

Demonstration
Example Scenario

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

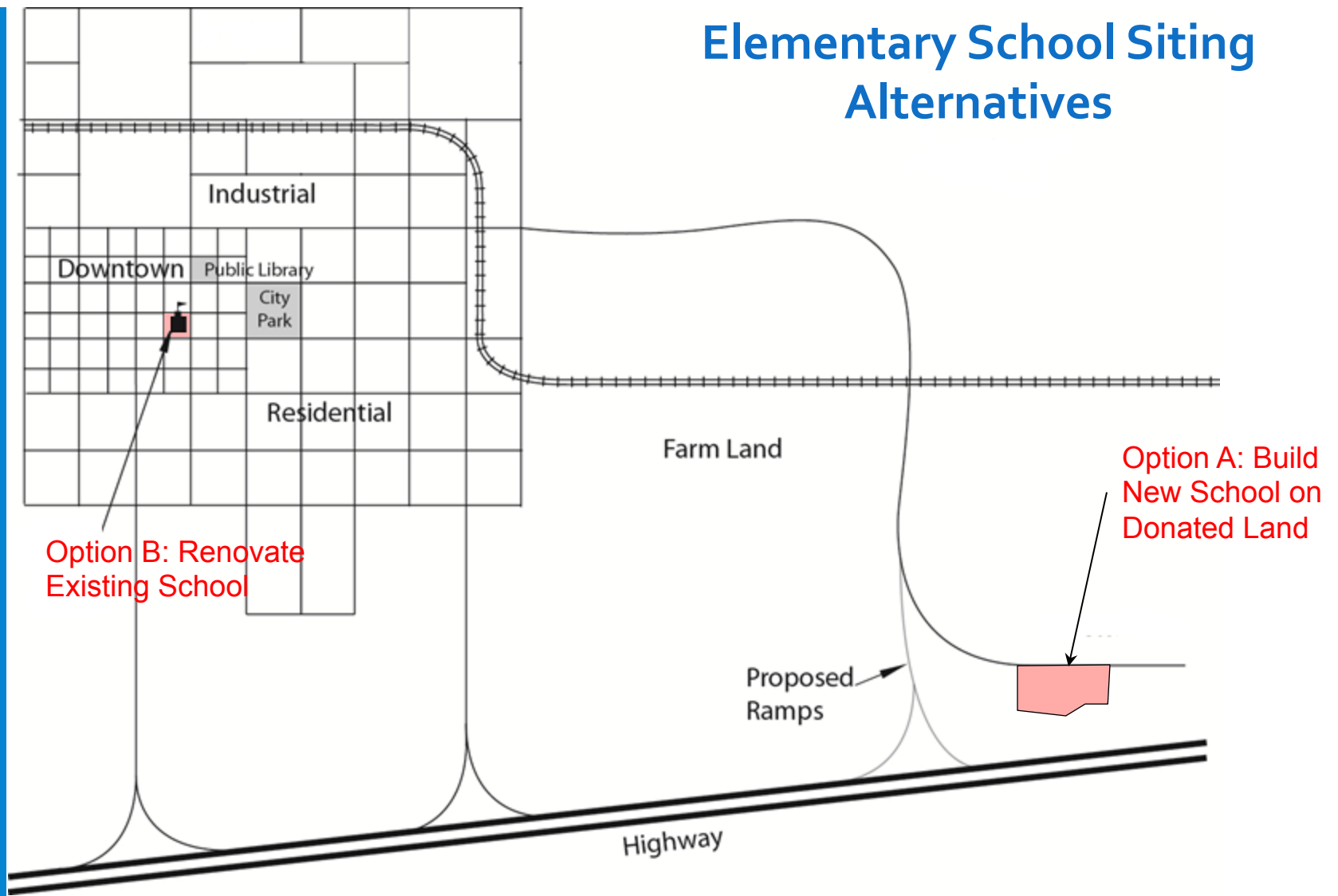***Option A: Build a new school on donated land***

- 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)

Demonstration
Example Scenario

Elementary School Siting Alternatives

Industrial

Downtown Public Library

City Park

Residential

Option B: Renovate Existing School

Farm Land

Option A: Build New School on Donated Land

Proposed Ramps

Highway

Demonstration
Example Scenario

High-Level Summary of Alternatives

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

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?

Demonstration
Smart School Siting Process

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

Site Comparison Demonstration

Setting Priorities
(Group Exercise and Discussion)

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

Site Comparison Demonstration
Comparing Options
(Group Exercise and Discussion)

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)

Smart School Siting Tool: Site Comparison Workbook

SUMMARY REPORT

Project Name: Inadequate elemntary school facility
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)*

	Worksheet	Overall Score
2	Proximity to Students and Population Centers	1
3	Location in the Community	-20
4	Beneficial Site Characteristics	-4
5	Connectivity with the Neighborhood	18
6	Bike and Pedestrian Accessibility	0

Score Profile

Estimated Costs

Borne By	One-time Capital Cost		Annual Cost	
Local government	$3,400,000	*	$0	*
Local school agency	$30,000,000	*	$210,000	*
Developers	$200,000	*	$0	*
Households	---		$82,000	*

* Incomplete: not all cost information available

Smart School Siting Tool: Site Comparison Workbook

SUMMARY REPORT

Project Name: Inadequate elemntary school facility
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)*

	Worksheet	Overall Score
2	Proximity to Students and Population Centers	92
3	Location in the Community	60
4	Beneficial Site Characteristics	93
5	Connectivity with the Neighborhood	42
6	Bike and Pedestrian Accessibility	30

Score Profile

Estimated Costs

Borne By	One-time Capital Cost		Annual Cost	
Local government	$320,000	*	$20,000	*
Local school agency	$36,000,000	*	$176,000	*
Developers	$0	*	$0	*
Households	---		$25,000	*

* Incomplete: not all cost information available

Conclusion
Why Use the Smart School Siting Tool

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

For More Information

The Smart School Siting Tool is available at:

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

For more information, please contact:

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