Core Areas of Work

• Education and Outreach
• Technical Assistance
• Supporting Our Federal Partners
• Research and Tool Development
  – Code and standards reform
  – TA products
  – Supporting Federal Partners
Smart Growth Implementation Assistance

- Launched in 2005
- Worked with 48 communities to date
  - Designed to address difficult challenges…
  - and find transferable solutions
A.2 Promote Infill and Redevelopment

Objective: To reduce development on natural lands by providing options for redevelopment and infill in areas with existing infrastructure.

Rationale: Communities can realize a significant reduction in regional stormwater runoff if they take advantage of underused properties such as abandoned or underutilized shopping centers. Redevelopment in these areas takes advantage of existing roads and utility infrastructure which can mean that the local government will not have to spend as much to maintain new infrastructure in the future. This leaves large areas of open space undeveloped.

A.2.1 Do the codes/ordinances: Differentiate requirements for infill and redevelopment versus new development to minimize natural resource destruction and provide energy economies?

<table>
<thead>
<tr>
<th>Specific Question and Potential Tools and Techniques</th>
<th>Assessment of Specific Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there requirements in place to encourage infill or redevelopment in areas with existing infrastructure (i.e., provide expedited permit review, reduced fees, cost sharing) to reduce the need for new road and water infrastructure?</td>
<td>G  Required by code/ordinance</td>
</tr>
<tr>
<td></td>
<td>Y  Expressly allowed</td>
</tr>
<tr>
<td></td>
<td>R  Code/ordinance silent, but typically allowed</td>
</tr>
<tr>
<td>Potential tools and techniques:</td>
<td></td>
</tr>
<tr>
<td>- Density bonus incentives.</td>
<td></td>
</tr>
<tr>
<td>- Streamline permitting.</td>
<td></td>
</tr>
<tr>
<td>- Special tax zones or tax increment finance districts.</td>
<td></td>
</tr>
<tr>
<td>- Mixed use development ordinances and criteria.</td>
<td></td>
</tr>
</tbody>
</table>

A.2.2 Do the codes/ordinances: Establish urban growth boundaries to discourage development in farmlands and forests?

<table>
<thead>
<tr>
<th>Specific Question and Potential Tools and Techniques</th>
<th>Assessment of Specific Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there established urban growth boundaries such as large lot or agricultural only zoning outside urban boundaries to keep the urban area compact and allow the rural areas to have fewer impervious surfaces?</td>
<td>G  Required by code/ordinance</td>
</tr>
<tr>
<td></td>
<td>Y  Expressly allowed</td>
</tr>
<tr>
<td></td>
<td>R  Code/ordinance silent, but typically allowed</td>
</tr>
<tr>
<td>Potential tools and techniques:</td>
<td></td>
</tr>
<tr>
<td>- Urban growth boundary ordinances.</td>
<td></td>
</tr>
<tr>
<td>- Purchase of Development Rights Program.</td>
<td></td>
</tr>
<tr>
<td>- Agricultural Conservation Easement.</td>
<td></td>
</tr>
</tbody>
</table>
Building Blocks for Sustainable Communities

Technical assistance led by grantees

Coordination with EPA

FORTERRA

PPS PROJECT FOR PUBLIC SPACES

GLOBAL GREEN USA

Smart Growth America
Making Neighborhoods Great Together
Launched in 2011
- 29 communities reached with contractor-supported training in year one
- 57 community workshops in 2012
- 46 anticipated in 2013
Developing Training Resources Based on the Tools

Walkability Workbook

http://www.walklive.org/project/walkability-workbook/
Building Blocks for Sustainable Communities

- Background
- Direct Assistance from EPA
  - Tools
  - Communities selected in 2012
  - Communities selected in 2011
  - Responding to the Request for Letters of Interest
- Assistance from EPA Grant Recipients
- Other tools and technical assistance programs

Background

Many communities around the country are asking for tools and resources to help them achieve their desired development goals, improve the quality of life for their residents, and make their communities more economically and environmentally sustainable. In response to this demand, EPA developed the Building Blocks for Sustainable Communities Program.

Building Blocks for Sustainable Communities seeks to provide quick, targeted technical assistance to communities using a variety of tools that have demonstrated results and widespread application. This technical assistance will help selected local and/or tribal governments to implement development approaches that protect the environment, improve public health, create jobs, expand economic opportunity, and improve overall quality of life. The purpose of delivering these tools is to stimulate a discussion about growth and development, strengthen local capacity to implement sustainable communities approaches, and provide ideas on how to change local policies and procedures to make communities more economically and environmentally sustainable.

The assistance will be offered in two ways in 2012:

Keep up to date through our webpage...

http://www.epa.gov/smartgrowth/buildingblocks.htm
• Green Infrastructure Demonstration Project
• Ten state capitals 2011 - 2012

Boston, MA
Jefferson City, MO
Little Rock, AR
Charleston, WV
Hartford, CT
• 5 more state capitals in 2013:
  – Frankfort, KY
  – Baton Rouge, LA
  – Des Moines, IA
  – Indianapolis, IN
  – Helena, MT
Governors Institute on Community Design

- Launched in 2005
  - Joint venture with HUD and DOT
  - 19 workshops to date
- Work directly with the governor and key state agency leadership
- Bring in agency leaders from multiple states to address one topic
Resource Publications

… and many more @
http://www.epa.gov/smartgrowth/publications.htm
EPA TOD Planning Resources

- Catalog of TOD Planning Strategies
- Tool for evaluating trip rates for mixed use TOD projects
- Forthcoming publication on TOD infrastructure finance strategies
- Building Blocks for Sustainable Communities
  - Tools related to station area planning
Phoenix, Mesa, Valley Metro Project

Transit Oriented Development
and Proposition 207 in Metropolitan Phoenix

November 2009

Strategic Package of Tools
Transit Oriented Development in Metropolitan Phoenix
## TOD Tools in the Phoenix Region: Summary Table

<table>
<thead>
<tr>
<th>TOD Policy Tools</th>
<th>Planning &amp; Visioning</th>
<th>Tool Priorities</th>
<th>Ongoing Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP-1 Regional TOD Strategic Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP-2 Citywide TOD Strategic Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LU-1 Prepare Station Area Plans and Market Studies</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>LU-2A, B &amp; C Station Area Rezoning: Rezone Station Areas, Use Restrictions Based on Public Health and Safety and Transportation Impacts and Optional Overlay Zone</td>
<td>Positive or Negative</td>
<td></td>
<td></td>
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<tr>
<td>LU-3A &amp; B Land Use Intensity Tools: Density Bonuses and FARs and Building Height Bonuses</td>
<td>Positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LU-4A &amp; B Land Use Standards Enhancement: Form-Based Codes and Design Guidelines</td>
<td>Positive</td>
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<td></td>
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<tr>
<td>LU-5A, B &amp; C Parking Tools: Revised Parking Standards, Shared Parking, and Parking Districts</td>
<td>Positive</td>
<td></td>
<td></td>
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<tr>
<td>DA-1 Fast Track Development Review</td>
<td></td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>DA-2 Capital Funding for Infrastructure</td>
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<td></td>
<td>Positive</td>
</tr>
<tr>
<td>DA-3 Tax Increment Financing</td>
<td></td>
<td></td>
<td>Requires State Legislation</td>
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<tr>
<td>DA-4 Reduced Impact Fees in Station Areas</td>
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<td></td>
<td>Currently Infeasible</td>
</tr>
<tr>
<td>PM-1 Streetscape and Pedestrian/Bike Improvements</td>
<td>Positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM-2 Façade and Site Frontage Improvement Program</td>
<td>Neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM-3 Tax-Exempt Bonds</td>
<td></td>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>PM-4 Tax Abatement</td>
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<td></td>
<td>Currently Infeasible</td>
</tr>
<tr>
<td>LA-1 Joint Development Program</td>
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<td></td>
<td>Neutral</td>
</tr>
<tr>
<td>LA-2 Land Acquisition Loan Funds</td>
<td></td>
<td></td>
<td>Neutral</td>
</tr>
<tr>
<td>LA-3 Funds for Buying Available Parcels in the Open Market</td>
<td>Neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI-1 Business District Association or Business Improvement District</td>
<td>Positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI-2 Marketing Plan</td>
<td></td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>PI-3 Livable Communities Program</td>
<td></td>
<td></td>
<td>Neutral</td>
</tr>
<tr>
<td>PI-4 Community Development Corporation (CDC) Lead Efforts</td>
<td>Currently Infeasible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI-5 Housing Trust Funds</td>
<td></td>
<td></td>
<td>Currently Infeasible</td>
</tr>
</tbody>
</table>
Trip Generation Tool for Mixed-Use Developments

Research has consistently shown that neighborhoods that mix land uses, make walking safe and convenient, and are near other development allow residents and workers to drive significantly less if they choose. In fact, research has found that in the most centrally located, well-designed neighborhoods, residents drive as little as half as much as residents of outlying areas. Along with these benefits, mixed-use development can improve communities in other important ways, including supporting affordable housing by lowering transportation costs. Studies have also shown that mixed-use development, especially in concert with other smart growth strategies, provides significantly higher returns to local governments through property and sales taxes while requiring lower per unit infrastructure and public-service costs. The typical development planning and approval process treats mixed-use developments as if the uses were separated and only accessible by car, leaving mixed-use developments at a disadvantage compared to conventional, single-use development. Recognizing the lower traffic impacts of mixed-use development in central, well-connected neighborhoods in the planning and approvals process would help communities reduce traffic and realize other benefits.

The technical methods to estimate how much traffic a new development will create, known as trip generation analysis, have been standardized by the Institute of Transportation Engineers (ITE) and are used by traffic engineers across the country. However, these methods are generally based on data collected from single-use, automobile-dependent, suburban sites. They do allow for some internal capture (trips that might be entirely within larger, mixed-use developments), but in general the methods do not adequately account for the effects of compact development, mix of uses, site design, walkability, transit, and regional accessibility — key elements of smart growth strategies and of a sustainable community.

To help provide communities with better tools to analyze new development, EPA, in cooperation with ITE, worked with leading researchers and practitioners to develop new data and methods to estimate the trip-generation impacts of mixed-use developments. EPA analyzed six metropolitan regions, merging data from household travel surveys, GIS databases, and other sources to create consistent land use and travel measures. The resulting linked models estimate internal capture of trips within mixed-use developments as well as walking and transit use for trips starting or ending in mixed-use developments. The models have been validated against actual traffic counts at mixed-use developments across the country. The method is currently used in several regions in California, Washington state, and New Mexico, and the Virginia Department of Transportation recently adopted it as a statewide standard for determining the traffic impacts of urban development.

The EPA team put the models into a spreadsheet tool that makes it easy for local government staff, consultants, and developers to estimate trips generated by a new mixed-use development. The spreadsheet estimates vehicle trips in the peak periods and for an entire day. The method also predicts trips by walking and transit and estimates the daily vehicle miles of travel associated with the development. The tool requires information about the development site and its surrounding area, including geographic, demographic, and land use characteristics. It also includes default national parameters for trip generation but allows the use of local values if available. An associated report describes the analytic basis for the method and the data used to calibrate and validate it. It is available upon request.

Download the spreadsheet .xlsx (MS Excel, 70K)
Federal Partnership for Sustainable Communities
Provide more **transportation choices**

Expand location- and energy-efficient **housing choices**

Improve **economic competitiveness** of neighborhoods by giving people reliable access to employment centers, educational opportunities, and other basic services.

Target Federal funding toward **existing communities** – through transit-oriented development and place-based policies.

**Align federal policies** and funding to remove barriers to collaboration, leverage funding and increase the effectiveness of existing programs.

Enhance the **unique characteristics** of all communities, whether rural, suburban or urban.
Federal Funding

HUD
- Sustainable Community Regional Planning Grants
- Sustainable Community Challenge Grants
- Community Development Block Grant Funds

DOT
- TOD Planning Grants
- Transportation Alternatives
- Congestion Mitigation Air Quality Program
- Surface Transportation Program

EPA
- Smart Growth Technical Assistance
- Brownfields Grants
- Green Infrastructure Technical Assistance
- Clean Water Revolving Loan Fund
Partnership Grants, Assistance & Programs

- Open Grants and Technical Assistance Opportunities
- On-Going Federal Programs

The Partnership agencies periodically offer funding opportunities. When these grants are offered, they will be announced here and on www.grants.gov. In addition, each agency maintains websites to track their own grant announcements. The grants announced on these sites will also be on www.grants.gov.

- HUD offers funding opportunities to help communities realize their own visions for building more livable, walkable, and environmentally sustainable regions.
- DOT offers funding opportunities to support more livable walkable communities.
- EPA offers grants to support activities that improve the quality of development and protect human health and the environment.

In addition, EPA maintains a listing of additional funding sources to build sustainable communities. A guide to federal and other national sources is available, as well as a guide to regional, state, and local funding opportunities.

**EPA Environmental Justice Grants**

EPA is seeking applicants for a total of $1.5 million in environmental justice small grants to be awarded in 2013. EPA’s environmental justice efforts aim to ensure equal environmental and health protections...
Federal Funding

**USDA**
- Rural Development Grant Assistance
- Rural Development Loan Assistance
- Urban Community Forrest Grants

**HHS**
- Community Transformation Grants (CDC)
- Health Center Capital Development Grants (HRSA)

**FEMA**
- Long Term Recovery Planning Resources
- Hazard Mitigation Assistance
The Strategy
New Bern, NC – Gateway District
Connecting Programmatic Silos

Tomorrow: The Plan

A set of area-wide redevelopment and implementation strategies are identified to reinforce the neighborhoods, revitalize retail, expand the open spaces network, and generally reinvigorate the community’s role as a cultural hub and gateway to downtown New Bern.

**Neighborhood Strengthening and Transformation**

- **Transformational redevelopment.** Moving from high densities of poverty within the neighborhoods and transforming them into mixed-income redevelopments that create healthier environments for children and enhance quality of life benefits for all residents.

- **Strategic Infill.** Build back the residential neighborhoods by placing new single- and multi-family housing on city-owned and vacant parcels. Create new housing choices while respecting the historic infrastructure within the neighborhoods.

**Rejuvenated Retail and Culture**

- **City Main Street: Broad Street.** Building on its prime location, heavy potential customer traffic, and high quality infrastructure, restore Broad Street as the city’s primary street for larger-scale retail amenities that is walkable but highly accommodating of auto-oriented trips.

- **Creative Main Street: Pollock Street.** Historically a mix of retail and single-family residential, Pollock is increasingly attracting a more eclectic mix of art-focused uses. Add new flexible housing options, studios, and creative work spaces for artists and entrepreneurs alike. Mix in galleries and cafes, and build on the existing mix of emerging ethnic restaurants.

- **Heritage Ma In Street: Queen Street.** Linking Broad, Pollock and the two strong neighborhood communities (Greater Duffield and Well Bellamy), Queen Street ties the Gateway District into surrounding districts of New Bern. Leverage its vital location, restore its lively street life, restore historic and create new public gathering spaces along this corridor.

A series of area-wide strategies were developed during the planning process.
Riverfront Crossings – Iowa City
Riverfront Crossings – Iowa City
BEFORE: Madison Avenue and Convention Center
Drawn by: Kevin Perry, Nevue Ngan Associates

AFTER: Madison Avenue with Stormwater Swale
Greening Americas Capitals – Little Rock, AR

**Fig. 12 Existing Watersheds**

Fig. 12 illustrates how the project area is part of two separate watersheds, one of which drains directly to the Arkansas River. Fig. 13 shows that Main Street is outside of the 500-year floodplain. Fig. 14 shows that mains north of the highway flow directly to the Arkansas River, while mains in SOMA first flow south.
Fig. 23 Potential Use Precincts

Fig. 24 Nodes and Pedestrian Connections

Potential zones of use, based on existing building occupancies and desires expressed in the workshops. Increased use of each zone would be bolstered by existing nodes and pedestrian connections, and a current proposal to extend the trolley route along Main Street.
Greening Strategies

There are diverse ways to add pervious surfaces, including switching to permeable paving surfaces in alleys and parking lots, adding landscape beds, and creating green roofs.
NEW CROSSWALKS

To be a true heart of the city, Main Street needs to be easy for all users to access and must feel comfortable and safe for pedestrians of all ages and abilities. New or improved crosswalks are an integral part of this effort, particularly in the SOMA neighborhood where the street is wider and traffic moves faster. Crosswalks with longer crossing times, embedded lights, reflective striping, and vocal countdowns are safer for tourists, families, differently-abled pedestrians, and other users.

Giving a consistent design to new and existing crosswalks all along Main Street, including SOMA, can help create a consistent sense of place and identity. These designs also enhance visibility. See the Indianapolis Cultural Trail on page 36 for an example of how this has worked in another city.

NEW BUILDINGS

New buildings that are built up to the sidewalk and face Main Street are already being built in the SOMA neighborhood. Wherever feasible, new buildings could have minimal setbacks and parking in the rear to allow gardens and civic space along the street, which would create a better environment for walking and biking. On parcels with existing buildings with larger setbacks, a rain garden could be built to collect and treat the runoff from the entire lot (see Street Section D on page 22).
POST OFFICE PARKING LOT

The parking lot at the Post Office could be a good site for rain gardens that could capture and filter water from the large, existing parking lot. Streetside rain gardens could also provide more shade and greenery for pedestrians on Main Street.
MURALS

Public art, such as murals, can be an integral part of any streetscape. Murals can depict the history, culture, and hopes of a city or of a neighborhood.

Designing and creating a mural can engage different parts of the community, including building owners and developers, students, educators, artists, scientists, historians, and tourists. A mural can also turn a blank wall facing the street from an unused space that offers little of interest to passersby into an amenity that beautifies the street and adds to the neighborhood’s sense of identity.
MAIN STREET STRATEGIES

CONNECT RIVERMARKET, DOWNTOWN + SOMA
- New attractions center on nodes 5 minute walks apart
- A common identity for entire length of Main Street

GREEN STREETS
- Rain gardens with native plantings
- Street trees (urban-tolerant, native, provide shade)
- Green roofs
- Downspouts linked to rain gardens
- Porous parking

PEDESTRIAN, BIKE AND TRANSIT EXPERIENCE
- Reduced ambient air temperature through use of rain gardens and street trees.
- New crosswalks.
- A shaded sidewalk on the I-630 overpass.
- A bike route on a parallel street (to be determined) and more bike racks on Main Street.
- An expanded trolley route along Main Street.
Greening America’s Capitals Example
Slack Plaza, Charleston, WV
MAP-21 Funding Structure

$37.7 billion/year in formula funding

- National Highway Performance Program ($21.8)
- Surface Transportation Program ($10.0)
- HSIP ($2.2)
- CMAQ ($2.2)
- Railway-Highway Crossing ($0.2)
- Transportation Alternatives ($0.8)
- Metro Planning ($0.3)

Note: Amounts in $ billions; individual program amounts do not add exactly to total due to rounding
National Highway Performance Program ($21.8B)

- Funds an enhanced National Highway System, combining functions of the existing NHS, IM and Bridge Programs.
  - Enhanced NHS includes existing NHS, all principal arterials, STRAHCNET, and intermodal connectors.
- Requires an asset management plan.
- States set targets for conditions and performance.
- Min. standards for Interstate & bridge conditions in a State:
  - DOT to set minimum standard for Interstate pavement condition.
  - Law sets standard for NHS bridges -- no more than 10% of deck area may be structurally deficient.
Surface Transportation Program ($10.0B)

- Continued flexible funding for Federal-aid highways, plus safety and bridges on any public road

- Eligibility for transportation enhancements, rec trails, ferry boats, consolidated border infrastructure program, truck parking facilities, and safe routes to schools (no set-aside)

- 50% of funds subject to suballocation based on population

- Rural provisions enhanced
  - Rural planning organizations, if any, must be consulted
  - Up to 15% of rural suballocation may be spent on minor collectors
Transportation Alternatives (TA) ($814M)

- Incorporates eligibilities from many current programs
  - Most (but not all) formerly TE-eligible activities
  - Recreational trails program
  - Safe Routes to Schools program
  - Planning, designing, or constructing roadways within the ROW of former Interstate or other divided highways

- Similar funding level to TEs under SAFETEA-LU
  - Total TA $ equal to 2% of MAP-21 highway funding
  - Funded via takedown from each State’s formula funds
    - 50% suballocated for more local control
    - 50% State allocation can be transferred to other formula programs