

## Draft Policy Option #5: Infill, Brownfield Re-development

### 1. Policy Description:

- a. Lay description of proposed policy action: Reuse land already developed but is now vacant, underused, or even mildly polluted. Meet the growing demand by a larger number of households comprised of singles, working parents and single parents seeking infill housing located close to services, jobs and transit. Offer significant greenhouse gas savings by cutting back on the number of automobile trips generated per household as well as offering energy efficient building designs.
- b. Policy Design Parameters:
  - i. Implementation level(s) beyond BAU: Infill and brownfield sites must be given priority for development over sprawling sites at the edges of communities. Fiscal, tax and other financing mechanisms must be geared toward recycling of existing buildings and underused land.
  - ii. Timing of implementation
  - iii. Implementing parties
  - iv. Other
- c. Implementation Mechanism(s): Indicate which mechanisms are to be used, and describe the specific approach that is proposed
  - i. Information and education
    1. A community considering infill/brownfield redevelopment must engage in a visioning process, often done through comprehensive planning, to agree on long-range goals and a vision for itself. Goals might include addressing housing shortages, adding open space and parks, or kick starting economic development in overlooked areas of town. Infill/brownfield redevelopment can be seen as a step in achieving many of these goals. The specific approach is to formulate infill/reuse scenarios, taking the following steps:
      - a. Evaluate property condition
      - b. Evaluate compability with the community's goals, planning and zoning, public safety, and property values
      - c. Evaluate compability with surrounding properties
      - d. Identify economic assets, opportunities, and impacts
      - e. Identify implementation strategies<sup>1</sup>

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<sup>1</sup> "Colorado Brownfields Handbook," page 19

2. Local governments can also offer education about the public benefits of infill and brownfield redevelopment. These benefits include increased property taxes generated by development improvements to property. In addition, cities can provide evidence showing that higher density projects in many situations can improve property values, and that a reduction in vacant lots and an increase in density reduce crime.
3. Private developers and local governments, along with groups such as the chamber of commerce, can market infill areas as having amenities in place, and they have character. There's no waiting for chain grocery stores and franchise restaurants, as is often the case in suburban settings. Shops, schools, and cafes already exist, along with theaters, libraries, art museums - you name it.
4. Environmental groups can appeal to people's sense of sustainability by showing how moving to infill and brownfield locations helps reduce global warming emissions, just by exercising an urban, walkable and transit friendly lifestyle. Sierra Club recognized in November 2005 a dozen developments around the U.S. who display an ability to offer transportation choices, revitalize neighborhoods, and preserve local values; one of those honored is the Albuquerque High/East Downtown redevelopment.<sup>2</sup>

ii. Technical assistance

1. Target and map potential sites and districts where infill/brownfield cleanup is needed or appropriate, and set quantifiable goals for the number of units desired for target areas. Those areas can then be rezoned for residential or light commercial uses that are compatible with residential infill. Local governments can then provide design guidelines and desired infill prototypes for targeted districts.
2. Local governments can prepare for developers performance codes that achieve the required performance (in energy, accessibility, parking, etc.) but allow for more flexibility in methods of achieving that performance. In addition, government can streamline entitlement/permit processes for smaller projects.
3. NM Environment Department has a "Targeted Brownfields Assessment Program; see [www.lgd.state.nm.us/PLAN/PDF/ENV2.PDF](http://www.lgd.state.nm.us/PLAN/PDF/ENV2.PDF)
4. Create a community land trust, with a nonprofit such as Albuquerque's Sawmill Land Trust or a local government such as

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<sup>2</sup> <http://riogrande.sierraclub.org/buildcom.html>

Santa Fe’s city program, to purchase empty land and establish equity controls.

iii. Funding mechanisms and or incentives

1. Location efficient mortgage programs recognize that, if infill housing allows consumers to choose more efficient and a variety of transportation options, then their house purchasing power is actually increased. Reduced auto ownership could increase purchasing power and therefore size of infill housing, reducing the urban/suburban size differential from 500 s.f. to 300 s.f.. Lending programs that acknowledge consumer savings from "energy efficient" homes could be extended to "efficiently located" homes. Prospective home buyers with only one car, or no cars, could enjoy increased buying power that would make it easier for them to choose the infill housing option. Neither energy efficient nor efficient location programs can actually enforce the behaviors they promote, but they can help home prices begin to reflect some of the social cost savings associated with those behaviors. The example below saves enough to cover \$36,000 additional mortgage or 200 more square feet of house.

Transportation-Related Savings		
Monthly Savings from Efficient Location	Inner Ring	Outer Ring
Home Size for buyer w/ \$60,000 annual income (\$20,000 down)	1100 s.f.	1600 s.f.
Monthly Mortgage	\$1,200	\$1,200
Monthly Commute Costs inner transit: \$3.50/day outer freeway: 70 miles/day x \$0.20/mile = \$14/day	\$70	\$280
Actual Monthly Costs	\$1,270	\$1,480

2. Tax increment financing is a vital tool to successfully develop or redevelop walkable, mixed-use, diverse neighborhoods and brownfields. A city-designated and voter-approved redevelopment district sets up a TIF district to finance improvements to public space. Debt is repaid over a 20-year period from the increment of new property and gross receipts taxes from private development in the district. There are no additional taxes on property owners within the redevelopment area to repay the bonds; rather, taxes collected above the increment are used to repay the bonds and any

interest. The benefits include redeveloping communities in accordance with the values of most New Mexicans, lower infrastructure investments, better public health, lower vehicle miles traveled and fewer accidents, job creation, and increased tourism, the last due to the numbers of tourists who spend substantial vacation time visiting walkable places.

3. Development (or impact) fees can be set to strongly encourage infill and discourage sprawl, by making the differential fees for infill development drastically less. For instance, Albuquerque through its Planned Growth Strategy has established a variable rate impact fee system. Projects located within the close-in areas pay a minimal percentage of total fees, while projects near the edge of the urbanized area pay maximum fees. This fee reduction helps even out the land cost differential between infill and outer-edge sprawl sites.
  4. Other funding mechanisms and incentives include:
    - a. Offer Predevelopment grants and loans to explore project feasibility on tough sites;
    - b. Assist with land acquisition and assemblage, write-downs and loans;
    - c. Advance loans against committed, but not funded, equity or debt
    - d. Provide funding of developer reserves;
    - e. Advance a letter of credit to enhance developer's ability to get a loan;
    - f. Provide rent subsidies for low-and moderate-income tenants;
    - g. Subsidize and/or arrange for public infrastructure financing
- ii. Voluntary and or negotiated agreements
  - iii. Codes and standards
    1. Put in place an urban design code, tied to the local government's comprehensive plan and that is consistent with the neighborhood's historic character and pedestrian scale. The code will define and protect the character of the neighborhood's residential streets and lanes, specify the residential, commercial, and mixed-use building types permitted, the types frontages permitted, and the siting of buildings on lots.
    2. Establish design guidelines to ban typical off-street parking lots in front of buildings, instead place parking on the street, to the rear of buildings or in parking courts in the interior of blocks.

3. Make all rights-of-way uniform widths to accommodate historic encroachments, increase lot sizes and in all cases promote walkability with design features that enhance pedestrian comfort.
  4. Invoke Governor's Executive Order on Environmental Justice to ensure context-sensitive street design.
  5. Improve street frontages, connectivity and architectural consistency with the neighborhood's historic patterns. Allow for live/work flexibility within new housing.
  6. Enhance major downtown and neighborhood streets with calm, walkable street design features. Decrease turn radii and adjust other design elements to achieve driving speed of 25 mph for pedestrian comfort. Remove left and right turn lanes except where absolutely necessary.
  7. Carry out necessary replatting for redevelopment of vacant lots and include full connections to all neighborhood streets.
  8. Tighten code enforcement practices and strengthen nuisance abatement laws.
  9. Exercise eminent domain powers to put in place meaningful amounts of land that can be redeveloped according to local desires, as adopted in a local economic development plan.<sup>3</sup>
- iv. Market based mechanisms
1. Offer a variety of developer incentives and disincentives to encourage infill and brownfield redevelopment, such as fee waivers, fast track planning, exactions, and no or low impact fees.
  2. Construct infill liner buildings to obscure off street parking lots, while waiving off street parking requirements.
- v. Pilots and demos
1. Offer incentives to reduce traffic congestion and parking demand, such as bus passes, live-where-you-work home mortgages, location efficient mortgage, cash-out parking at \$3.00 per day, and complete shower facilities for bicyclists
  2. Reserve five percent of a city's capital improvement program pay for needed upgrades and repairs to sidewalks, so that existing and new residents and employees can easily navigate neighborhoods and downtown by foot.

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<sup>3</sup> "Vacant and Abandoned Property: Remedies for Acquisition and Redevelopment." Land Lines, October 2005

- vi. Research and development
- vii. Reporting
- viii. Registry
- ix. Other?

2. BAU Policies/Programs, if applicable:

- a. Description of policy/program #1 Characteristics of business as usual:
    - i. Unnecessary land consumption
    - ii. Low density
    - iii. Auto dependent
    - iv. No mass transit, or token/ineffectual
    - v. Big box commercial/institutional, with three-quarters of land devoted to the car
    - vi. Lack of public space
    - vii. Isolated office parks
    - viii. Strip shopping centers
    - ix. Public and private investments already made in existing communities not used
    - x. Excessive amount of public infrastructure funds
    - xi. Lack of a sense of community
  - b. Description of policy/program #2
  - c. Etc.
3. Types(s) of GHG Benefit(s): US EPA estimates show significant savings in NOx and VOC emissions.<sup>4</sup> And, depending in design, density and access of households to daily needs and transit, vehicle miles traveled can be greatly reduced.<sup>5</sup>

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<sup>4</sup> Comparing Methodologies to Assess Transportation and Air Quality Impacts of Brownfields and Infill Redevelopment, 2001 [http://www.epa.gov/livability/pdf/comparing\\_methodologies.pdf](http://www.epa.gov/livability/pdf/comparing_methodologies.pdf)

<sup>5</sup> The Transportation And Environmental Impacts Of Infill Versus Greenfield Development: A Comparative Case Study, 1999 [http://www.epa.gov/livability/pdf/infill\\_greenfield.pdf](http://www.epa.gov/livability/pdf/infill_greenfield.pdf)

- a. CO<sub>2</sub>: case studies cited in Section 4A show greenhouse gases can be cut by nearly one-half when building developments on infill sites versus sprawling out to greenfields.
  - b. CH<sub>4</sub>
  - c. N<sub>2</sub>O
  - d. HFC's, SFC's
  - e. Black Carbon
4. Types of Ancillary Benefits and or Costs, if applicable: according to a report prepared for the EPA, “although not a panacea, in the right conditions, infill development can make travel more convenient by reducing travel time, lowering travel costs, and lessening congestion. Infill development can also cost significantly less, in total public dollars, in private transportation dollars, and in externalities. Finally, the results suggest that infill development can improve community environmental quality and inputs to quality of life such as accessibility.... (and) *can* produce non-trivial transportation, environmental, and public infrastructure cost benefits.” The report further concludes that “the infill site would perform better than the greenfield site across most transportation, environmental, and other performance categories. In general, the models predicted that infill development would produce shorter average travel times and fewer vehicle miles of travel, while also using up less open space and producing less air pollution. Traffic congestion results varied among the case studies. Neighborhood-level analysis also revealed greater local accessibility and support for more transportation options.”<sup>6</sup>
- a. Example #1 San Diego Greenfield versus Infill Study:
    - i. Average drive-alone trip times from the infill site would be 48% less.
    - ii. Congestion (driving in Level of Service F) would be 75% lower within one mile of the infill site.
    - iii. Average travel costs would be 42% lower with the infill site.
    - iv. Per capita vehicle miles traveled would be 48% lower.
    - v. Auto use as a percentage of all trips would be 11% lower.
    - vi. Infrastructure costs per dwelling would be 90% lower at the infill site.
    - vii. The infill site does not use open space, saving 160 acres of open space compared to the greenfield site.

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<sup>6</sup> The Transportation And Environmental Impacts Of Infill Versus Greenfield Development: A Comparative Case Study, 1999 [http://www.epa.gov/livability/pdf/infill\\_greenfield.pdf](http://www.epa.gov/livability/pdf/infill_greenfield.pdf)

- viii. Ozone (smog) precursor emissions of NOx and VOC at the infill site would be 51% and 43% lower, respectively.
  - ix. Greenhouse gas emissions with the infill site would be 48% lower.
  - x. Neighborhood “completeness” of services and amenities would be 108% higher.
  - xi. Transit-oriented residential and employment density would be 77% and 12% higher, respectively.
  - xii. Bicycle network connectivity would be 61% higher.<sup>7</sup>
- b. Example #2 Montgomery County MD Greenfield versus Infill Study:
- i. Average VMT per capita would be 58% lower with the infill site.
  - ii. Infill vicinity congestion would be 1114% of that at the greenfield site.
  - iii. Average household travel costs would be 54% lower at the infill site.
  - iv. Infrastructure costs per dwelling would be 92% lower at the infill site.
  - v. The infill site does not use open space, saving 365 acres of open space compared to the greenfield site.
  - vi. Ozone (smog) precursor emissions of NOx and VOC at the infill site would be 46% and 52% lower, respectively.
  - vii. Greenhouse gas emissions with the infill site would be 49% lower.
  - viii. Infill transit-oriented residential density would be 1,035% higher.
  - ix. Infill transit service density would be 127,900% higher.<sup>8</sup>
- c. Etc.

5. Estimated GHG Savings and Costs Per MMTCO<sub>2</sub>e:

- a. Summary Table of:
  - i. GHG potential in 2012, 2020, 2050
  - ii. Net Cost per MMTCO<sub>2</sub>e in 2012, 2020, 2050
- b. Insert Excel Worksheet showing summary GHG reduction potential and net cost

6. Data Sources, Methods and Assumptions:

- a. Data Sources

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<sup>7</sup> Ibid

<sup>8</sup> Ibid.

- i. “The Colorado Brownfields Handbook – A Local Government Guide to Site Reuse and Economic Redevelopment.” CO Dept. Public Health and Environment, 2005
  - b. Quantification Methods
  - c. Key Assumptions
7. Key Uncertainties if applicable:
  - a. Benefits
  - b. Costs
8. Description of Ancillary Benefits and Costs, if applicable:
  - a. Description of issue #1
  - b. Description issue #2
  - c. Etc.
9. Description of Feasibility Issues, if applicable:
  - a. Description of issue #1
  - b. Description of issue #2
  - c. Etc.
10. Status of Group Approval:
  - a. Pending
  - b. Completed
11. Level of Group Support:
  - a. Unanimous Consent
  - b. Supermajority
  - c. Majority
  - d. Minority
12. Barriers to consensus, if applicable (less than unanimous consent):

- a. Description of barrier #1
- b. Description of barrier #2
- c. Etc.