ZONING ADVISORY PANEL PUBLIC COMMENT

Received Between November 5, 2021 (noon) and December 3, 2021 (noon)

As part of the County's strong commitment to an open and transparent public process, comments received from any Citizen which reference the Zoning Advisory Panel (ZAP) are usually made available to the general public through uploading the comments to the County's website prior to the next ZAP meeting. Similarly, if the commenter requests, the information may also be forwarded to the ZAP Members directly.

** Please Note: Inclusion of Public Comments herein, does not imply any support nor opposition of the comments by the County.*

*Any Web Links included in the Public Comment have not been vetted by the County and readers should proceed with caution when accessing Web links**

From:	Thomas, Andrew
To:	County_Planning_Mail
Subject:	ZAP Public Comment 11.7.2021
Date:	Sunday, November 7, 2021 7:12:35 PM
Attachments:	Public Comment ZAP, 11.7.2021.docx

Please see attached.

--

Andrew R. Thomas

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Public Comment, ZAP, Andrew Thomas, 11.7.2021

Per the various public comments relating to form-based codes and similar planning strategies, it is important for the ZAP to understand the broad implications of such practices both in terms of their direct effect and indirect consequences. Although advocates of form-based codes, smart growth, or inclusionary zoning often paint a rosy picture of "vibrant" attractive neighborhoods with tightly packed residential and commercial real estate, the reality of such practices often differs from what is originally claimed.[i]

1. First, with regards to the advocate's criticisms of Euclidian zoning, it is important to understand that traditional Euclidian zoning arose from a desire by residents to have consistency of use in a given area. Although a default code assumed a certain type of use in a given neighborhood it would also allow variances to be granted if the community saw fit a non-conforming use. How this differs from form-based codes is that form-based codes pay little or no regard to how existing residents might feel about a new use being introduced into a neighborhood. For example, it may be permissible under a form-based code for a mid-rise apartment building with Twenty units to replace a single-family house in a neighborhood of mostly single-family homes. Under a Euclidian approach such a project would only be undertaken if community consensus approved. Given that even those concerned about housing affordability acknowledge community consensus and local control are important[ii] it may be best to consider how to adapt the current regimen to consider new types of development rather than to implement a new system.
2. Second, form-based codes especially those that promote infill, that is demolishing existing low density uses such as single family homes, and replacing them with high density houses often invites real estate speculation that drives up the cost of existing housing while producing an excess of expensive, not particularly desire high density development. Although there is often a need for multi-family housing, a development that meets a variety of needs disrupting existing communities to provide what is little more than an investment opportunity where the costs are borne by the community and not the investor is questionable public policy at best.[iii]
3. Despite the claims of advocates of form-based code being "inclusive" the reality such planning practices is that the often fuel gentrification and exacerbate existing class-based conflicts. For example, Portland Oregon and Seattle Washington both of which have endorsed such planning practices have experienced skyrocketing housing costs and have lost significant number of lower and middle income residents, as well as members of various minority groups.[iv]
4. Fourth, despite the claims of advocates that form based codes create "vibrant, livable communities" the reality of the type of housing they produce is that it is often an inferior good compared to what people consistently prefer. Although some people may desire to live in an apartment or condo most people desire a single-family house[v]. The notion that promoting infill where garages and sheds are converted into housing units or that people aspire to live in an apartment building, especially if they have a family, is questionable. As stated above, although architectural drawings often depict attractive, bright, and

interesting looking spaces the reality of this type of development as it compares to what most people prefer clearly represents two different things.

5. Fifth, form-based codes especially those that promote density have a number of unintended consequences or do not achieve their stated goals. For example, proponents of form-based codes often talk about making communities "walkable" or express a desire to limit automobile use. Although it is obviously desirable to promote walking and bicycle use it is realistic to assume people will give up using their cars in the way prescribed in a plan? Given people's consumer preferences along with a consideration of what is obviously practical the idea that you can have a community where people walk to the grocery store is not realistic.[vi] Also, we should consider the impacts of densification on traffic and infrastructure. Although advocates of density often present densifying an area as having only positive impacts it is also obvious that packing more people, cars, homes, and business into an area leads to more congestion and more complex issues for city managers to deal with.
6. Sixth, given the observations it is useful to consider what options may be better for the urban areas in Lewis and Clark County. Given the observations noted above it is likely desirable to maintain a Euclidian planning scheme that allows for reasonable variances. Also, some consideration should be given to allowing different levels of density of development in the urban zone. This will attract more people to urban areas, create more attractive communities that people desire to actually live in rather than be forced to live in, and ultimately allow for more efficient services to be provided. This approach is juxtaposed to the idea that urban areas should be very dense and strive to limited yards and single-family housing. If such plans were used it is likely more people would want to live in an urban area rather than living in a rural or suburban area. Also, given that there is no real shortage of land the idea that it is not possible to expand urban areas simply is not true. For the sake of illustration, consider the images and maps of Dijon France depicted below. Although Dijon's city center is a dense medieval city, areas within a mile of the city center there is both modern low rise commercial development and American style single family housing with pools and large yards. Also, it is clear that areas are specifically designated for certain uses and community character is respected. This and many other European cities depict the ability to plan for a truly diverse and inclusive urban spaces.

Figure 1: Map of Dijon France. Numbers indicate subsequent detail

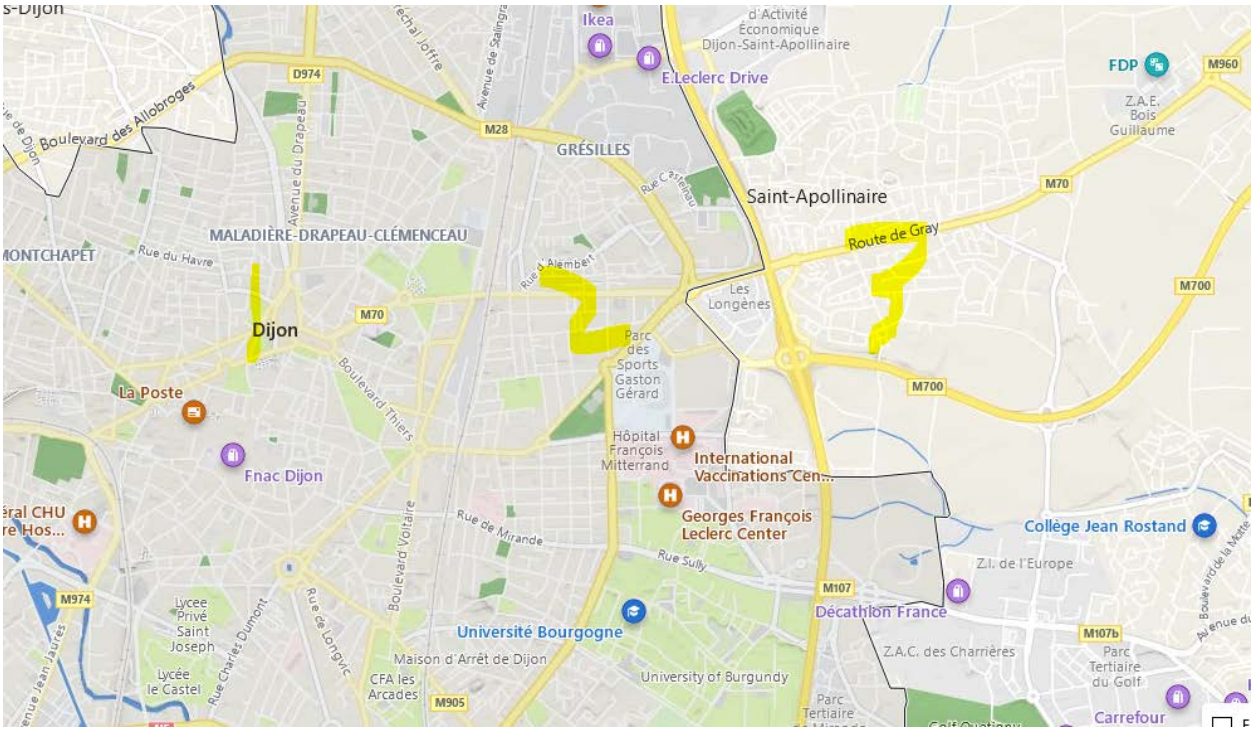


Figure 2: Detail #1 City Center

Figure 3: Detail #2 Mid density commercial/residential

Figure 3: Detail #3 Low density urban.

[i] https://www.voiceofsandiego.org/public-transportation/someone-finally-quantified-san-diegos-smart-growth-failure/
https://www.cre.org/real-estate-issues/smart-smart-growth/

[ii] https://nlihc.org/sites/default/files/AG-2021/02-10_Avoiding-Overcoming-Opposition.pdf
https://shelterforce.org/2021/01/28/say-it-aint-so-joe-bidens-ill-advised-plan-to-eliminate-exclusionary-zoning/

Portland, Oregon Voters Sour on Densification Over Time, https://www.northassoc.org/2008/05/19/portland-oregon-voters-sour-on-densification-over-time

[iii] https://www.plannersnetwork.org/2004/04/city-planners-realize-windfalls-for-developers-and-oppose-inclusionary-zoning/

From the Wikipedia article on inclusionary zoning: Inclusionary zoning remains a controversial issue. Some affordable housing advocates seek to promote the policies in order to ensure that housing is available for a variety of income levels in more places. These supporters hold that inclusionary zoning produces needed affordable housing and creates income-integrated communities.

Yet other Affordable Housing advocates state the reverse is true, that Inclusionary Zoning can have the opposite effect and actually reduce affordable housing in a community. For example, in Los Angeles, California, inclusionary zoning apparently accelerated gentrification, as older, unprofitable buildings were razed and replaced with mostly high-rent housing, and a small percentage of affordable housing; the net result was less affordable housing. In New York, NY, inclusionary zoning allows for up to a 400% increase in luxury housing for every unit of affordable housing and for an additional 400% luxury housing when combined with the liberal use of development rights. Critics have stated the affordable housing can be directed to those making up to $200,000 through the improper use of an Area Median Income, and used as political tools by organizations tied to various politicians. New York City communities such as Harlem, the Lower East Side, Williamsburg, Chelsea and Hell's Kitchen have experienced significant secondary displacement through the use of Inclusionary Zoning.

Real Estate industry detractors note that inclusionary zoning levies an indirect tax on developers, so as to discourage them from building in areas that face supply shortages. Furthermore, to ensure that the affordable units are not resold for profit, deed restrictions generally fix a long-term resale price ceiling, eliminating a potential benefit of home ownership.

Free market advocates oppose attempts to fix given social outcomes by government intervention in markets. They argue inclusionary zoning constitutes an onerous land use regulation that exacerbates housing shortages.

Some of the most widely publicized inclusionary zoning battles have involved the REIT AvalonBay Communities. According to the company's website, AvalonBay seeks to develop properties in "high barrier-to-entry markets" across the United States. In practice, AvalonBay uses inclusionary zoning laws, such as the Massachusetts Comprehensive Permit Act: Chapter 40B, to bypass local zoning laws and build large apartment complexes. In some cases, local residents fight back with a lawsuit.[1] In Connecticut, similar developments by AvalonBay have resulted in attempts to condemn the land or reclaim it by eminent domain.[13] In most cases AvalonBay has won these disputes and built extremely profitable apartments or condominiums.

Other legal battles have occurred in California, where many cities have implemented inclusionary zoning policies that typically require 10 percent to 15 percent of units to be affordable housing.[14] The definition of affordable housing includes both low-income housing and moderate-income housing. In California, low-income housing is typically designed for households making 51 percent to 80 percent of the median income, and moderate-income housing is typically for households making 81 percent to 120 percent of the median income.[14] Developers have attempted to fight back these requirements by challenging local inclusionary zoning ordinances through the court legal system. In the case *Home Builders Association of Northern California v. City of Napa*, the California First District Court of Appeal upheld the inclusionary zoning ordinances of City of Napa that require 10 percent of units of the new development project to be moderate income housing against the Home Builders Association that challenged the City of Napa.[15] Cities have also attempted to impose inclusionary requirements on rental units. However, the Costa-Hawkins Rental Housing Act prohibits cities in California from imposing limitation on rental rates on vacant units.[16] Subsequently, developers have won cases, such as *Palmer/Sixth Street Properties, L.P. v. City of Los Angeles (2009)*, against cities that imposed inclusionary requirements on rental units, as the state law supersedes local ordinances.[17]

Citizen groups and developers have also sought other ways to strengthen or defeat inclusionary zoning laws. For example, the initiative and referendum process in California allows citizen groups or developers to change local ordinances on affordable housing by popular vote. Any citizens or interest groups can participate in this process by gathering at least the required number of signatures so that the measure proposed can quality to be on the ballot; once enough signatures are submitted and the ballot measure is cleared by election officials, the ballot measure is typically placed on the ballot for the upcoming election.[18] One recent case is Proposition C in San Francisco. This ballot measure was placed on the ballot for the June 2016 California primary election. Passed in June 2016, this proposition amends the City's Charter to increase the requirement for affordable housing for development projects of 25 units or more.[19]

The clash between these various interests is reflected in this study published by the libertarian-leaning Reason Foundation's public policy think tank, and the response of a peer review of that research. Local governments reflect

and in some cases balance these competing interests. In California, the League of Cities has created a guide to inclusionary zoning which includes a section on the pros and cons of the policies.

[iv] https://en.wikipedia.org/wiki/Inclusionary_zoning It is suggested that IZ policies may not effectively disperse low-income units throughout the region, which actually contradicts the aim of the policy itself.[20] For instances in Suffolk County, it is found that there is a spatial concentration of IZ units in poor neighbourhood coupled with higher proportions of Black and Hispanic, which are considered the minorities.[20] Furthermore, 97.7% of the IZ units were built in only 10% of the census tract from 1980 to 2000, which is area with the lowest-income neighbourhood coupled with clustering of minorities.[20] It is indispensable to notice that housing policies is controlled by local government rather than regional government in Suffolk County, therefore without regional coordinations of housing policy, it fails to consider the inter-municipality distribution of low-income household within the county.[20] Besides, density bonuses given to property developers for the provision of IZ units have intensified the concentration of affordable units in poor neighborhood (Ryan & Enderle as cited in Mukhija, Das, Regus et al., 2012).[21] This shows that IZ policies may fail to disperse the low-income distributions when it is carried out without taking regional coordination into account.

Moreover, with density bonuses allocated to property developers for the provision of IZ units, it implies the community would be bearing the cost of increasing population density and sharing existing infrastructure.[21]

*Mukhija, Vinit; Das, Ashok; Regus, Lara; Tsay, Sara Slovin (2015-03-15). "The Tradeoffs of Inclusionary Zoning: What Do We Know and What Do We Need to Know?". Planning Practice & Research. **30** (2): 222–235.*

https://www.seattletimes.com/seattle-news/data/are-low-earners-in-seattle-moving-up-or-moving-out/

https://www.latimes.com/opinion/op-ed/la-oe-0501-renn-reverse-great-migration-20160501-story.html

[v] https://www.wsj.com/articles/millennials-prefer-single-family-homes-in-the-suburbs-1421896797
[vi] http://demographia.com/dib-smg.htm
https://i2i.org/smart-growth-more-traffic-congestion-and-air-pollution/

From:	Pat Keim
To:	Austin, Eric
Cc:	david brown; archie harper; dustin ramoie; jacob kunz; john rausch; joyce evans; kim smith; lois steinbeck; mark runkle; pat keim; tyler emmert; SHANE shaw; Greg McNally; Lindsay Morgan; luciastewart
Subject:	Re: ZAP Homework Reminder
Date:	Friday, November 26, 2021 7:15:22 PM

My comment is directed toward Emergency Services Facilities, shown as Public Safety Facilities in the draft. R1 and R2 zones don't list them under permitted uses but instead puts them under conditional uses. As I stated in a previous meeting, they should be listed as permitted uses just as in the B1 zoning. Listing them as conditional uses would require the public safety agency (fire, law enforcement, medical) to apply for a Conditional Use Permit to locate in the R1 and R2 areas.

The R1 and R2 areas are very often the places to which emergency services must respond and therefore often need to be located to best serve the public. Requiring them to secure a Conditional Use Permit makes getting them located where they may need to be somewhat problematic. Getting a CUP is problematic at best, cumbersome, and expensive. That added expense is an unnecessary burden to the taxpayer. It either adds to the cost of the facility or reduces the service to the taxpayer.

Pat Keim

On Wed, Nov 24, 2021 at 1:34 PM Austin, Eric <eric.austin@montana.edu> wrote:

> Greetings everyone,
>
> This is your friendly homework reminder ahead of the meeting we have scheduled for a week from today. That homework is to review the last draft of the residential and commercial zone examples that Lindsay developed, with an eye toward any questions, concerns or recommendations you might have based on the role or perspective you bring to the ZAP and/or the priorities that resulted from the STEEP analysis.
>
> If you don't have them easily at hand, you can find a copy of that draft here: https://www.lccountymt.gov/fileadmin/user_upload/County_Com_Dev/ZAP/Section_9_Urban_Mixed-Use__Residential_and_Commercial_Examples_.pdf
>
> You might also find it useful to look at the Zoning codes from Helena and East Helena that Greg sent out on November 15th. Just to save you having to dig through your email, the links he shared are these:

Helena: CHAPTER 1 ADMINISTRATION AND ENFORCEMENT (amlegal.com)

East Helena: Zoning Ordinance (easthelenamt.us)

Lastly, in terms of timing, please send anything you come up with to Greg, Lindsay, Lucia and me ahead of the meeting if possible, but minimally to bring it with you to the meeting. If you have any questions as you are reviewing any of these materials, please feel free to contact Greg and/or Lindsay and they can help you out.

In the meantime, Happy Thanksgiving! I look forward to seeing you all next week.

Best,

Eric

--

Dr. Eric K. Austin

Professor, MPA Coordinator

Department of Political Science

406.994.5168

MONTANA STATE UNIVERSITY
Department of Political Science

From: Austin, Eric
To: Greg McNally
Subject: Tyler"s Notes
Date: Monday, November 29, 2021 11:33:58 AM
Attachments: Residential Zone Example.pdf

Hi Greg,
These are the scanned materials Tyler left with me after the last meeting. Sorry it's such a big file – I wanted to keep the maps in color and at a fairly high resolution.

-Eric

--
Dr. Eric K. Austin
Professor, MPA Coordinator
Department of Political Science
he/him/his
406.994.5168

MONTANA STATE UNIVERSITY
Department of Political Science

Don't have the staff, nor should you. City's

Helena's Zoning is terrible

Residential Zone Example:

(1.) unlikely at best community input

Butte isn't a City, they follow codes + permits → Don't say "it's impossible"

902 R-1/R-2

902.01 Intent

The R-1/R-2 (residential) Zone provide for residential dwellings and limited nonresidential development that protects and enhances the residential nature of the area.

902.02 Principal Uses

The following principal uses are allowable in the R-1/R-2 Zone:

902.02.01 Agriculture, apiculture, forestry, horticulture, silviculture
902.02.02 Boarding/rooming house (1-3 residents)
902.02.03 Community residential facility, Type I (1 to 12 residents)
902.02.04 Day care, adult (up to 12 adults)
902.02.05 Day care, family (up to 6 children)
902.02.06 Day care, group (7 to 12 children)
902.02.07 On-site construction office
902.02.08 Open space
902.02.09 Parks/playgrounds
902.02.10 Residence, single-dwelling unit
902.02.11 Residence, two-dwelling units
902.02.12 Trails
902.02.13 Utility, distributed power
902.02.14 Utility, minor

MVM Great Northern TC Skelton Park Downtown District ✱

902.03 Accessory Uses

Each permitted accessory use shall be customarily incidental to the principal use established on the same parcel; be subordinate to and serve such principal use; be subordinate in area, extent, and purpose to such principal use; and contribute to the comfort, convenience, or necessity of users of such principal use.

The following uses shall be allowed only when a principal use has already been established on the parcel:

902.03.01 Accessory Uses and Buildings
902.03.02 Home Occupations, in compliance with Section 16, of these Regulations.
902.03.03 Temporary Uses, in compliance with Section 15 of these Regulations.

902.04 Conditional Uses

The following uses are permitted, upon approval of a Conditional Use Permit (CUP) by the Board of Adjustment (BoA), in accordance with Section 14, of these Regulations:

902.04.01 Bed and breakfast
902.04.02 Cemeteries, mausoleums, columbariums (Remove?)
902.04.03 Community cultural facility

902.04.04 Community residential facility, Type II (13 or more residents)
902.04.05 Day care center (13 or more individuals)
902.04.06 Educational facility (Higher Education)
902.04.07 Educational facility (K-12)
902.04.08 Mobile home park
902.04.09 Parking lot
902.04.10 Public safety facility
902.04.11 Residence, multiple-dwelling units (3 or more units)
902.04.12 Worship facility

902.05 Special Exception Uses

The following uses are allowed in addition to an established principal use, an accessory use, or conditional uses:

902.05.01 Agricultural
902.05.02 Apiculture
902.05.03 Community residential facility, Type 1
902.05.04 Day Care Facility
902.05.04.01 Adult Daycare
902.05.04.02 Family Daycare
902.05.04.03 Group Daycare
902.05.05 Forestry
902.05.06 Horticulture
902.05.07 Silviculture
902.05.08 Telecommunication Facility (?)

902.06 Minimum and Maximum Lot Area

There is no minimum lot area. The maximum lot area is 1/4-acre in size.

902.07 Maximum Lot Coverage

Forty (40%) percent.

902.08 Minimum Setbacks

Front: Ten (10) feet.
Rear: Ten (10) feet.
Side: Eight (8) feet.

902.09 Encroachments (Setbacks)

Utility distribution lines and related equipment may be located within a required setback.

902.10 Building Height

Maximum building height: thirty (30) feet.

(NOTE: Add exceptions to height requirements.)

902.11 Street Standards

Construction of streets shall be in accordance with City of Helena requirements.

902.12 Parking Standards

The minimum number of off-street parking spaces required for each land use can be found in Table A. (NOTE: Table A will be located towards the end of this Chapter.)

902.13 Lighting Standards

All outdoor electrical lighting shall be installed in conformance with the lighting standards found in Section 9?? (NOTE: This Section will be located at the end of this Chapter and will include Residential, Commercial, Feature, American Flag, and Construction Sites lighting requirements, along with Exemptions from these requirements.)

Commercial Zone Example:

907 B-2

907.01 Intent

The B-2 (general commercial) Zone provides for compatible residential uses and a broad range of commercial and service uses that serve large areas of the City and that are normally required to sustain a community.

907.02 Principal Uses

The following principal uses are allowable in the B-2 Zone:

907.02.01 Administrative government agency
907.02.02 Administrative services
907.02.03 Agriculture, apiculture, forestry, horticulture, silviculture
907.02.04 Agriculture supply sales
907.02.05 Artisan shop
907.02.06 Auction sales
907.02.07 Bed and breakfast
907.02.08 Boarding/rooming house (1-3 residents)
907.02.09 Boarding/rooming house (4-20 residents)
907.02.10 Bus terminal
907.02.11 Carnivals and circuses
907.02.12 Community center
907.02.13 Community cultural facility
907.02.14 Community residential facility, Type I (1 to 12 residents)
907.02.15 Community residential facility, Type II (13 or more residents)
907.02.16 Construction material sales
907.02.17 Country inn, guest ranch
907.02.18 Day care, adult (up to 12 adults)
907.02.19 Day care center (13 or more individuals)
907.02.20 Day care, family (up to 6 children)
907.02.21 Day care, group (7 to 12 children)
907.02.22 Equipment rental, large
907.02.23 Equipment rental, small

Price + Affordability are not the same thing. what?

Defies Physics

907.02.24 Financial services
907.02.25 Funeral home
907.02.26 General/professional services
907.02.27 General repair
907.02.28 General retail sales
907.02.29 Health care center
907.02.30 Health care facility
907.02.31 Hotel/motel, lodge, resort
907.02.32 Indoor entertainment, sports and recreation
907.02.33 Instructional facility
907.02.34 Itinerant outdoor sales
907.02.35 Manufactured/mobile/modular housing sales
907.02.36 Medical marijuana dispensary
907.02.37 On-site construction office
907.02.38 Open space
907.02.39 Outdoor concerts and theatrical performances
907.02.40 Parking lot
907.02.41 Parks/playgrounds
907.02.42 Public safety facility
907.02.43 Residence, single-dwelling unit
907.02.44 Residence, two-dwelling units
907.02.45 Residence, multiple-dwelling units (3 or more units)
907.02.46 Restaurant
907.02.47 Restaurant, drive-in
907.02.48 Specialized food production
907.02.49 Tavern
907.02.50 Trails
907.02.51 Utility, distributed power
907.02.52 Utility, minor
907.02.53 Vehicle fuel sales
907.02.54 Vehicle sales and rental
907.02.55 Vehicle services
907.02.56 Veterinary clinic, small animals
907.02.57 Worship facility

907.03 Accessory Uses

Each permitted accessory use shall be customarily incidental to the principal use established on the same parcel; be subordinate to and serve such principal use; be subordinate in area, extent, and purpose to such principal use; and contribute to the comfort, convenience, or necessity of users of such principal use.

The following uses shall be allowed only when a principal use has already been established on the parcel:

907.03.01 Accessory Uses and Buildings
907.03.02 Home Occupations, in compliance with Section 16, of these Regulations.
907.03.03 Temporary Uses, in compliance with Section 15 of these Regulations.

907.04 Conditional Uses

The following uses are permitted, upon approval of a CUP by the BoA, in accordance with Section 14, of these Regulations:

907.04.01 Animal shelter
907.04.02 Campground/RV park
907.04.03 Casino
907.04.04 Cemeteries, mausoleums, columbariums (Remove?)
907.04.05 Commercial kennel, animal boarding, stables or other animal-related services
907.04.06 Contractor yard
907.04.07 Educational facility (Higher Education)
907.04.08 Educational facility (K-12)
907.04.09 Emergency shelter
907.04.10 Industrial, light
907.04.11 Mini-storage facility
907.04.12 Mobile home park
907.04.13 Outdoor entertainment, sports and recreation
907.04.14 Parking structure
907.04.15 Pre-release center
907.04.16 Shopping center
907.04.17 Vehicle repair
907.04.18 Veterinary clinic, large animals
907.04.19 Warehouse

907.05 Special Exceptions

The following uses are allowed in addition to an established principal use, an accessory use, or conditional uses:

907.05.01 Agricultural
907.05.02 Apiculture
907.05.03 Community residential facility, Type 1
907.05.04 Day Care Facility
- 907.05.04.01 Adult Daycare
- 907.05.04.02 Family Daycare
- 907.05.04.03 Group Daycare

907.05.05 Forestry
907.05.06 Horticulture
907.05.07 Silviculture
907.05.08 Telecommunication Facility (?)

907.06 Minimum and Maximum Lot Area

There is no minimum lot area. The maximum lot area is 1/4-acre in size.

907.07 Maximum Lot Coverage

No maximum.

907.08 Minimum Setbacks

5 areas: West side / North of Custer / Airport / Padburry / ~~North of Canyon Ferry~~ / Burnham

Front: No minimum.

Rear: No minimum., unless abutting a residential zone and then the minimum setback is fifteen (15) feet.

Side: No minimum., unless abutting a residential zone and then the minimum setback is fifteen (15) feet.

907.09 Encroachments (Setbacks)

Utility distribution lines and related equipment may be located with a required setback.

907.10 Building Height

Maximum building height: seventy-five (75) feet.

(NOTE: Add exceptions to height requirements.)

BAD STREETS

907.11 Street Standards

Construction of streets shall be in accordance with City of Helena requirements.

907.12 Parking Standards

The minimum number of off-street parking spaces required for each land use can be found in Table A. (NOTE: Table A will be located towards the end of this Chapter.)

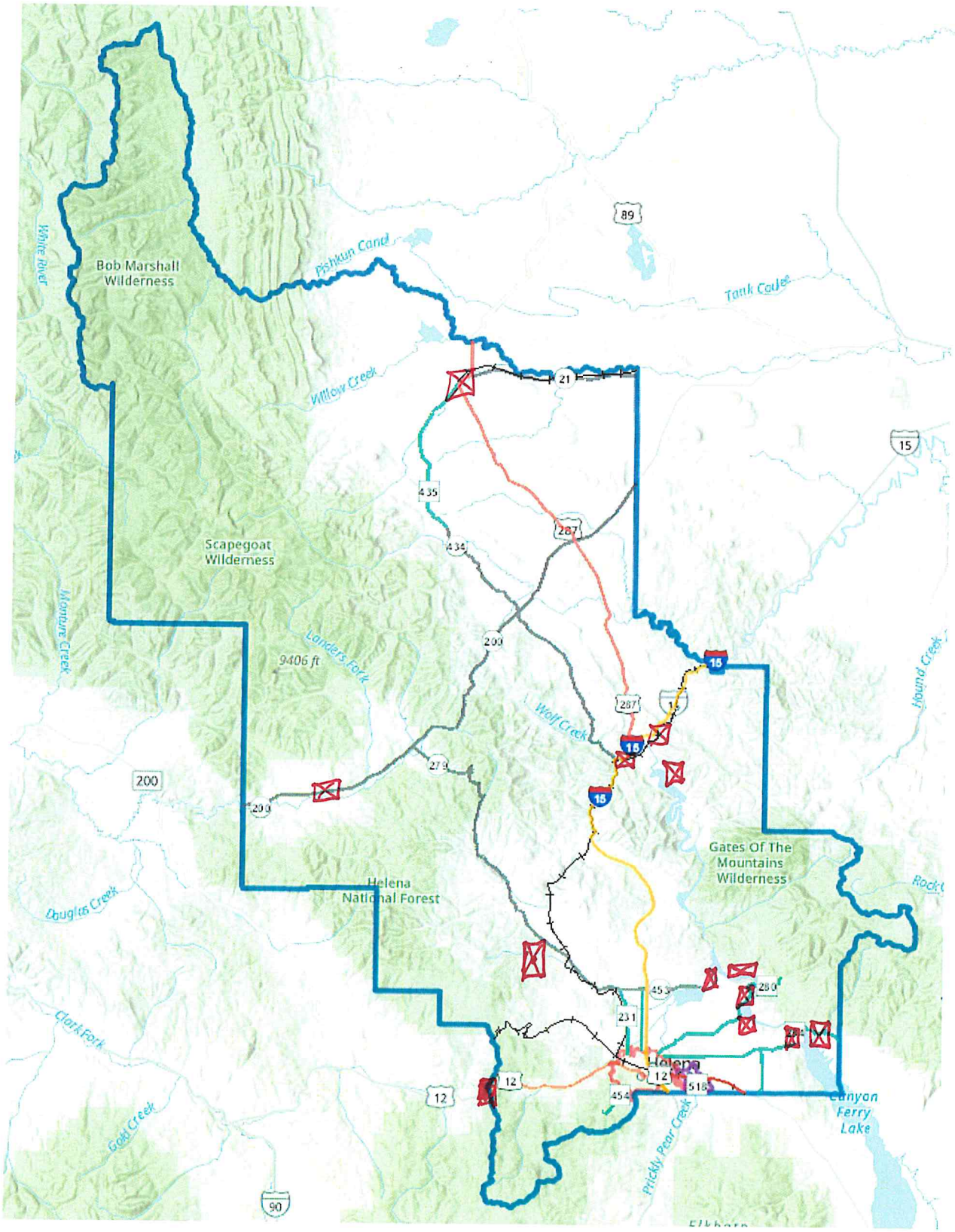
907.13 Lighting Standards

All outdoor electrical lighting shall be installed in conformance with the lighting standards found in Section 9?? (NOTE: This Section will be located at the end of this Chapter and will include Residential, Commercial, Feature, American Flag, and Construction Sites lighting requirements, along with Exemptions from these requirements.)

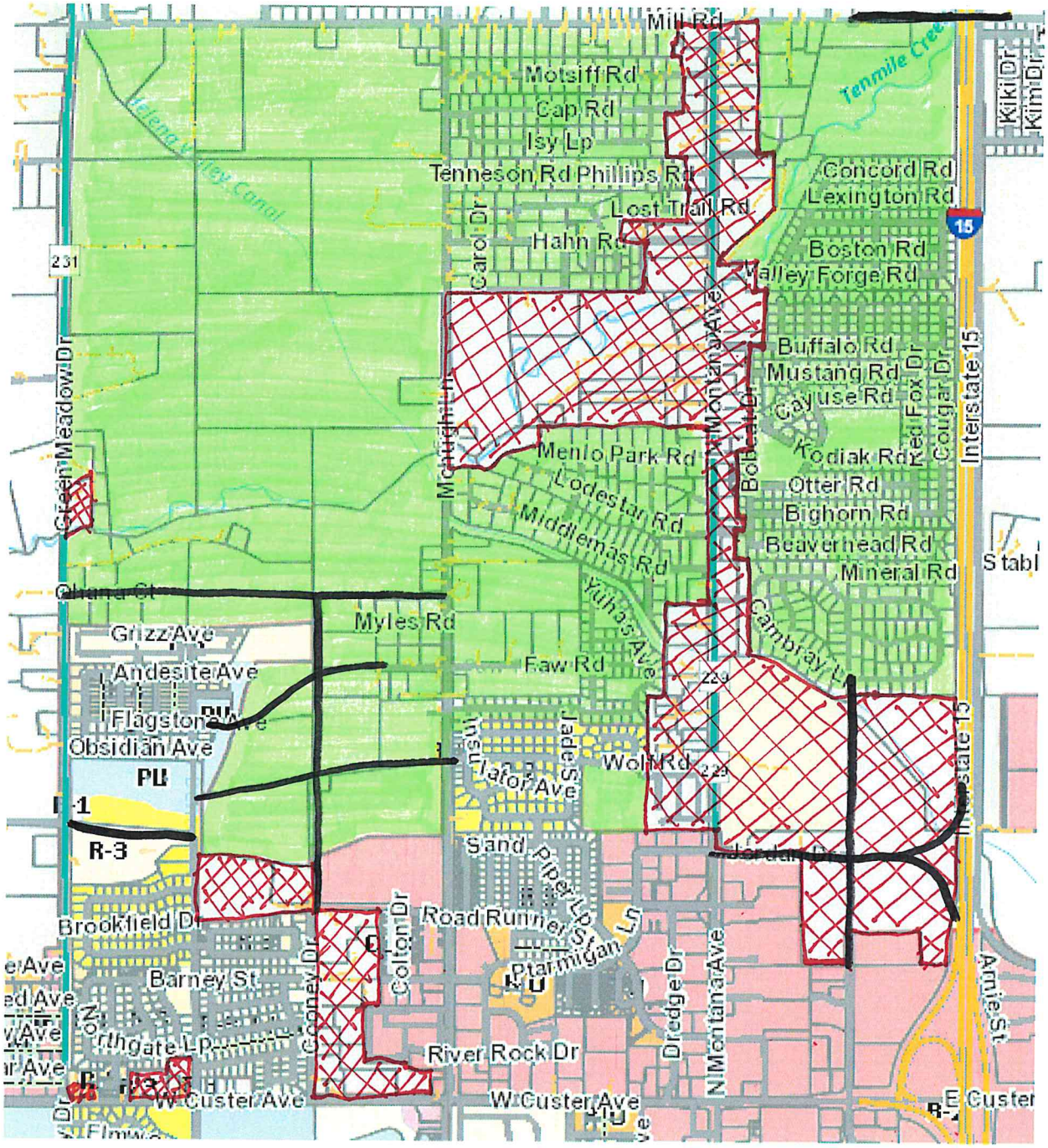
1.) Doesn't Allow SF housing
2.) It forces/requires 1980's parking
3.) It is sprawl by all standards except our standards

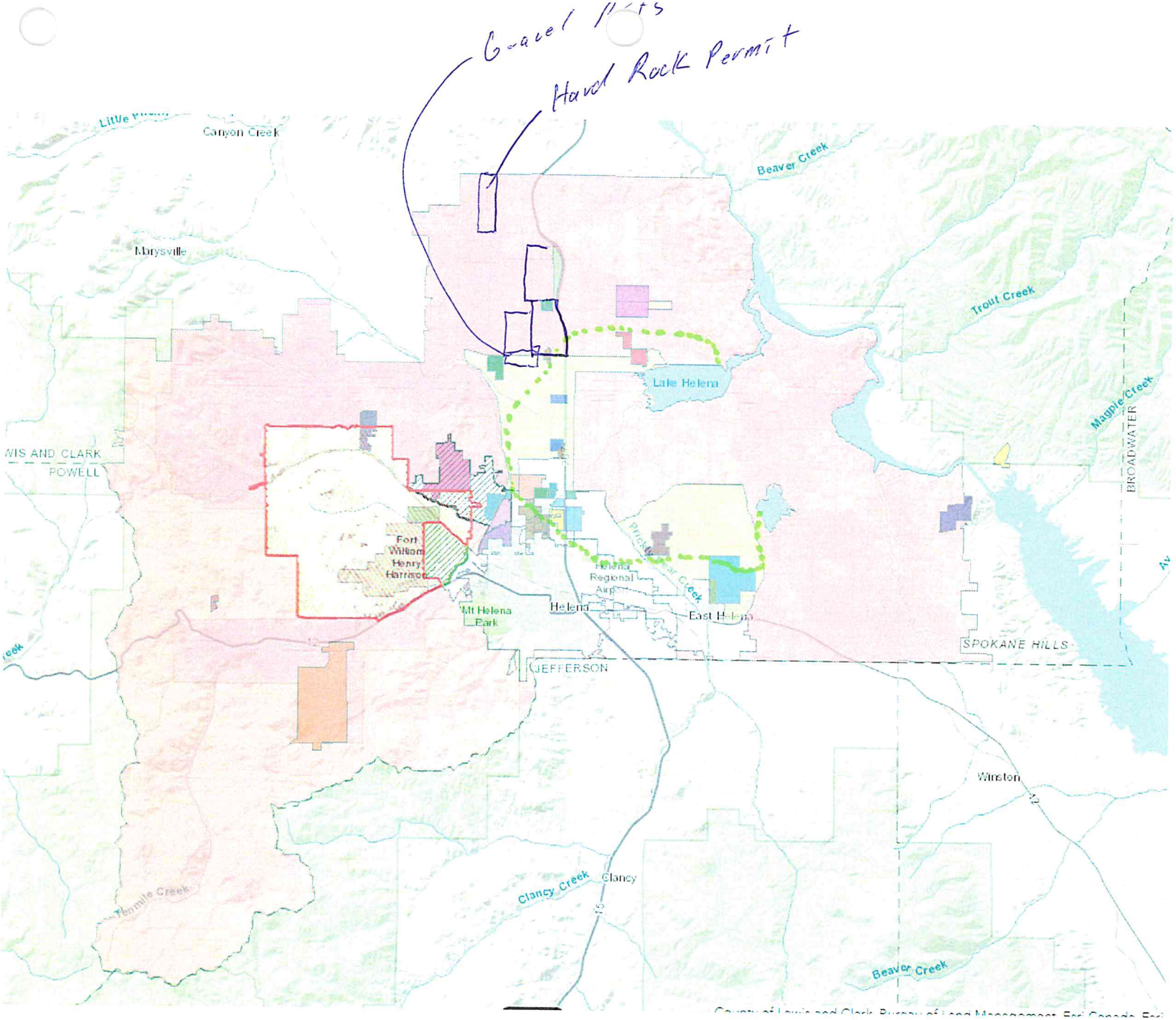
Habitat is very high functioning

A.) How well have we done, compared to peers



Lincoln
Wolf Creek
Craig
Augusta
Rec Sites


Mill Rd
Motsiff Rd
Cap Rd
Isy Ln
Tenneson Rd
Phillips Rd
Lost Trail Rd
Hahn Rd
Carol Dr
Concord Rd
Lexington Rd
Boston Rd
Valley Forge Rd
Buffalo Rd
Mustang Rd
Cayuse Rd
Kodiak Rd
Otter Rd
Bighorn Rd
Beaverhead Rd
Mineral Rd
Menlo Park Rd
Lodestar Rd
Middlemas Rd
Yuhas Ave
Cambray Ln
Myles Rd
Faw Rd
Grizz Ave
Andesite Ave
Flagstone Ave
Obsidian Ave
Wolf Rd
Laser Ave
Sand Piper St
Road Runner St
Ptarmigan Ln
Brookfield Dr
Colton Dr
Barney St
Cooney Dr
Northgate Loop
River Rock Dr
Dredge Dr
W Custer Ave
E Custer
N Montana Ave
Interstate 15
Tennile Creek
Kiki Dr
Kim Dr
Green Meadow Dr
Glacier Ct
Fox Dr
Cougar Dr
Bobcat Dr
McCaughlin Ln
Stabl
PU
R-1
R-3
B-2 Flex
R-O Flex


Gravel Pits
Hard Rock Permit
Canyon Creek
Beaver Creek
Marysville
Trout Creek
Lake Helena
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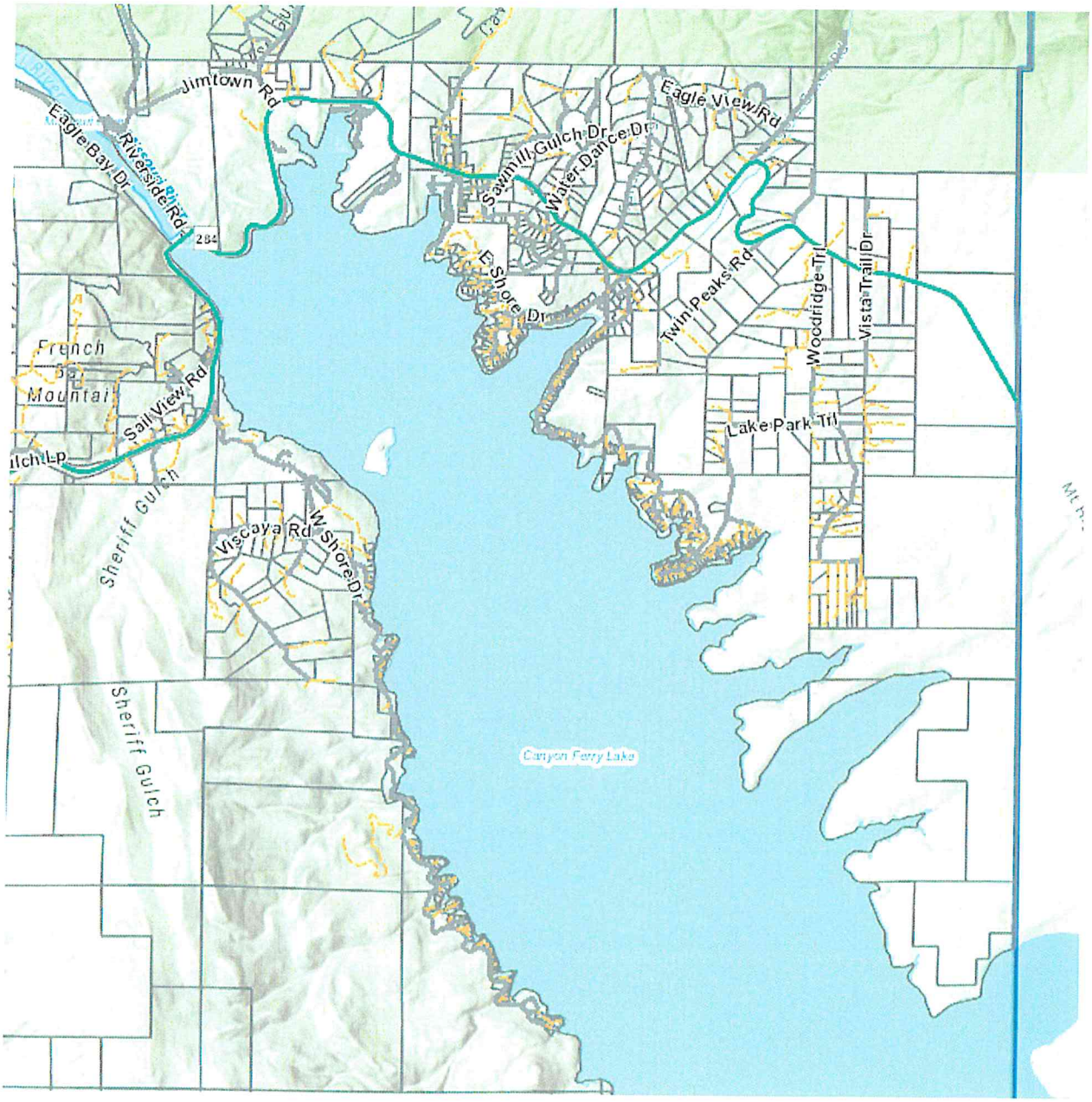
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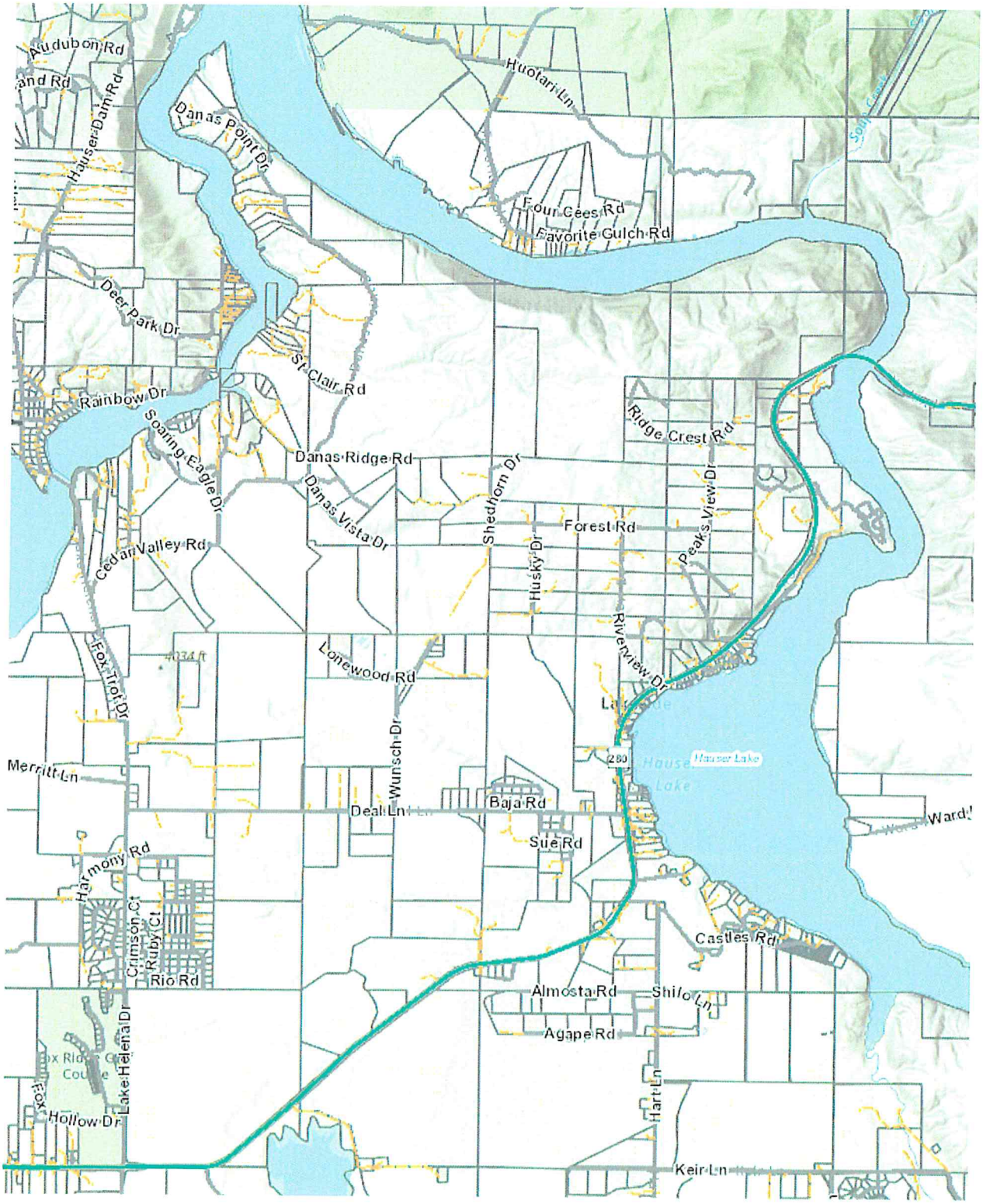
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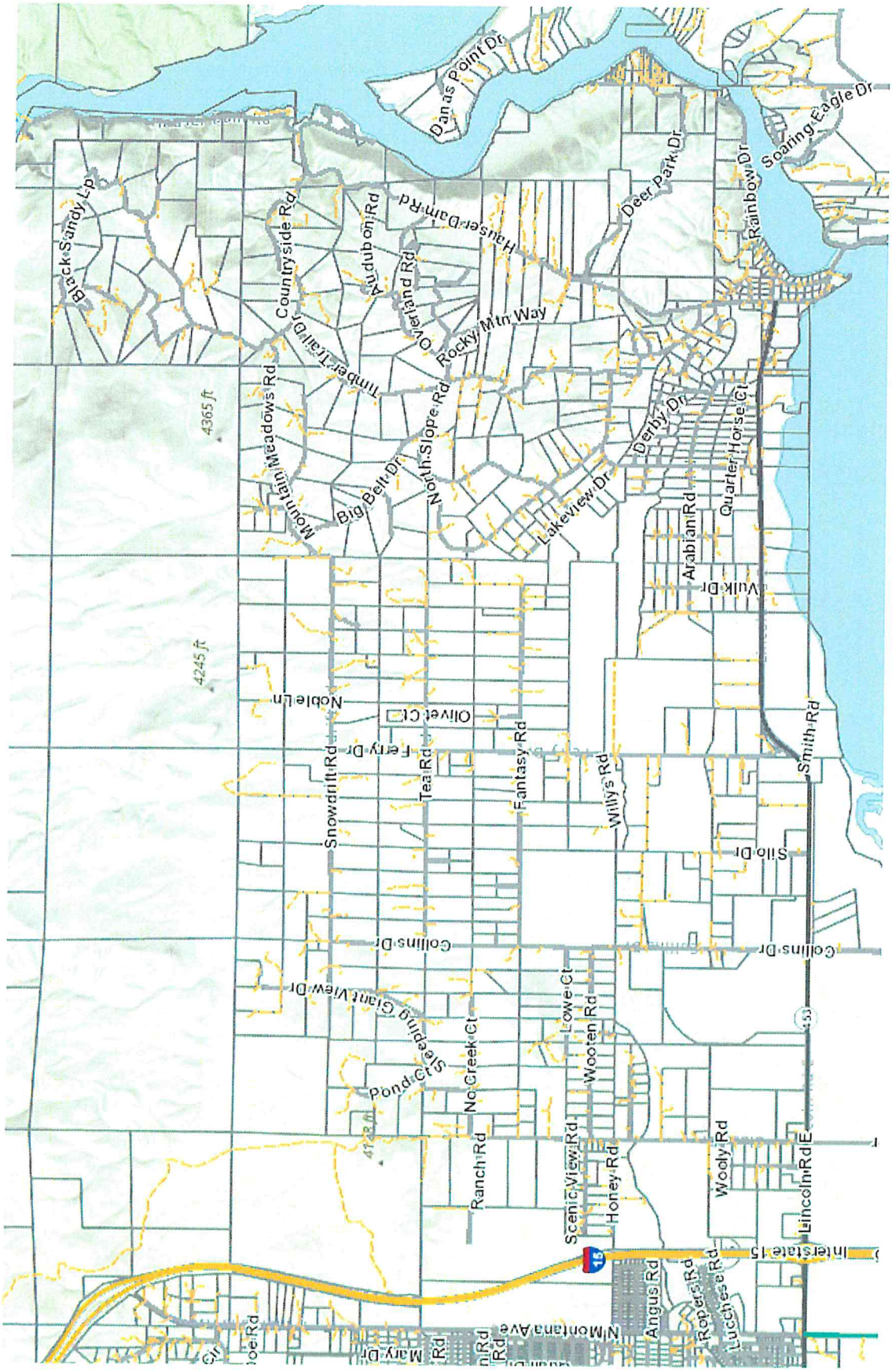
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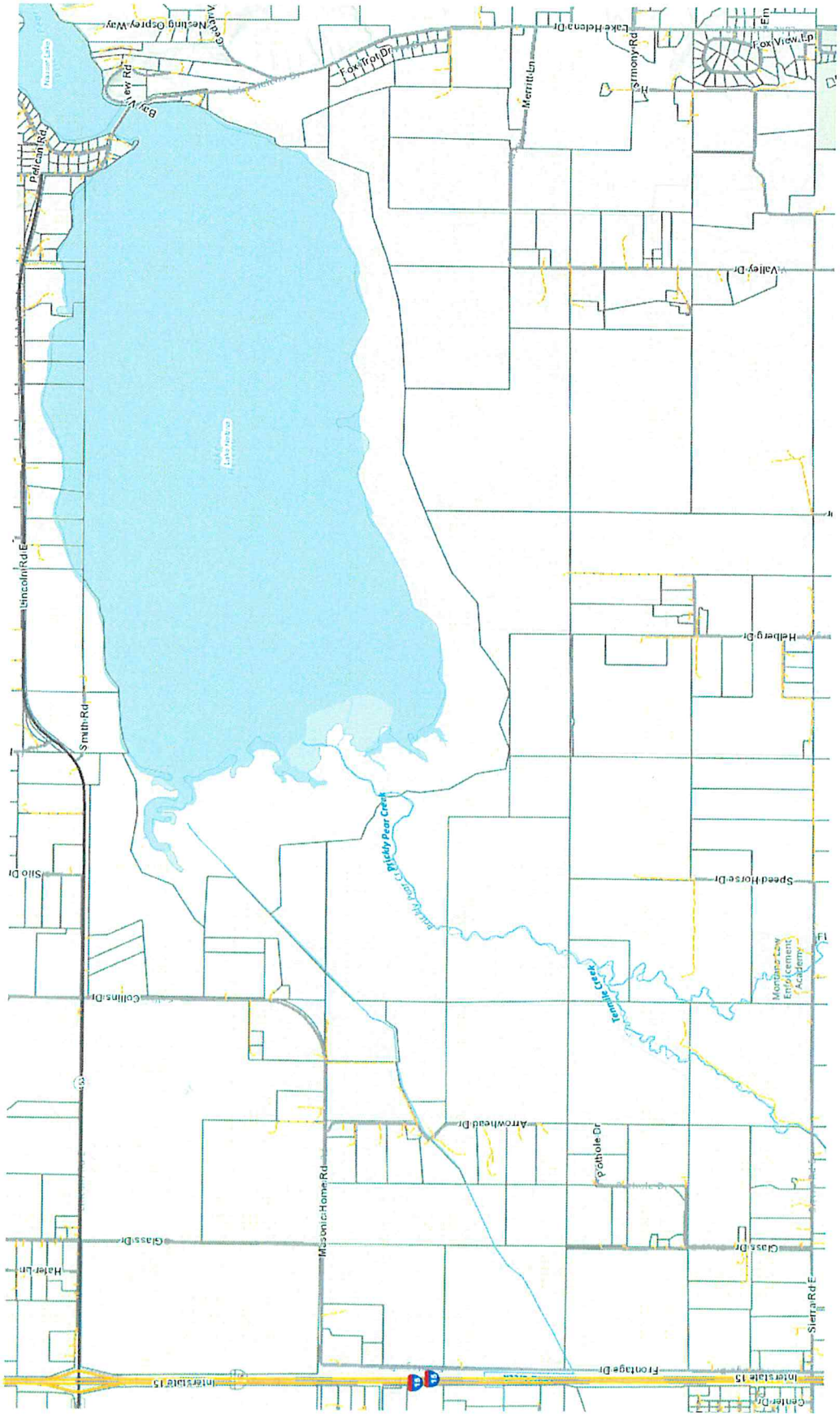
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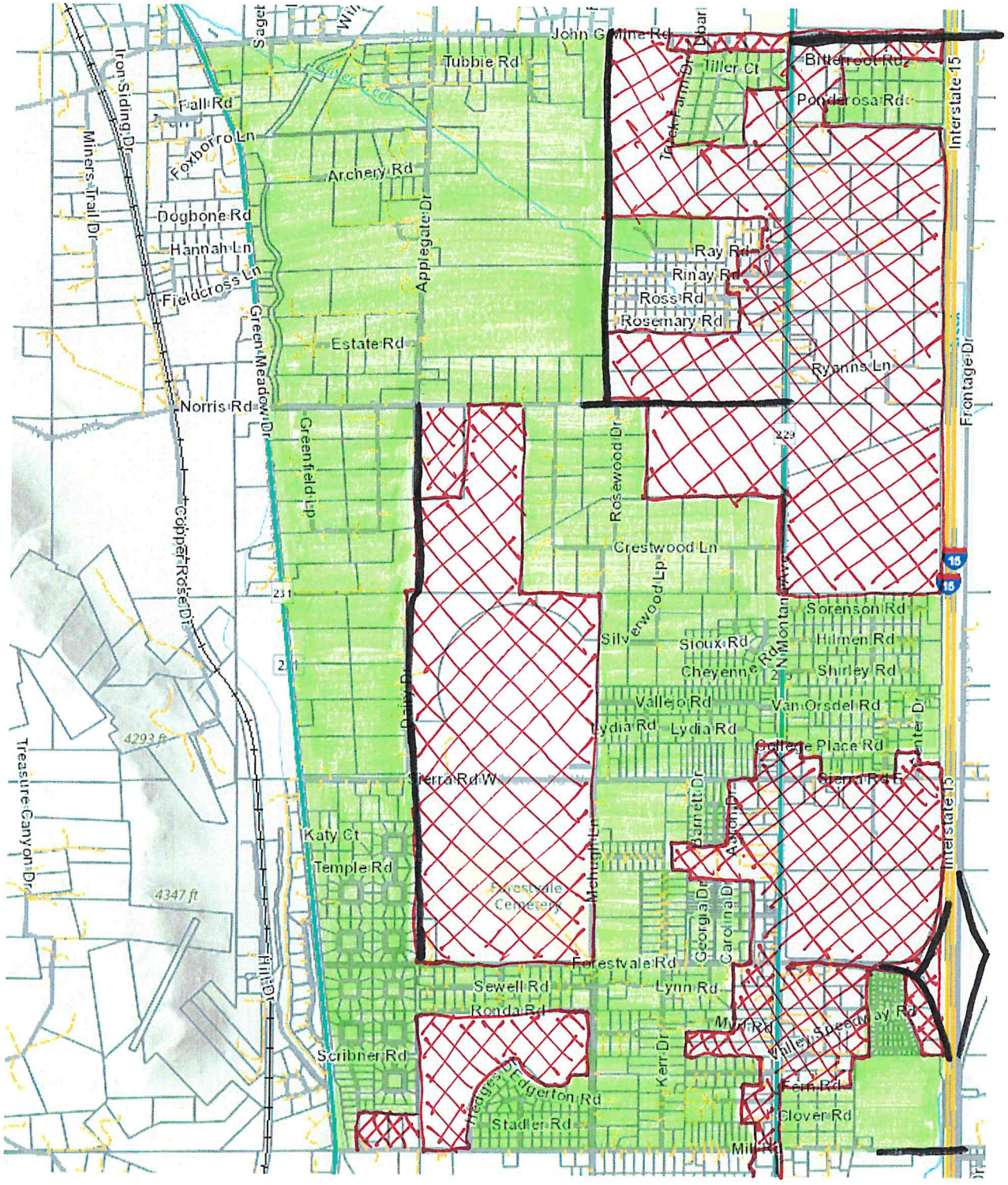
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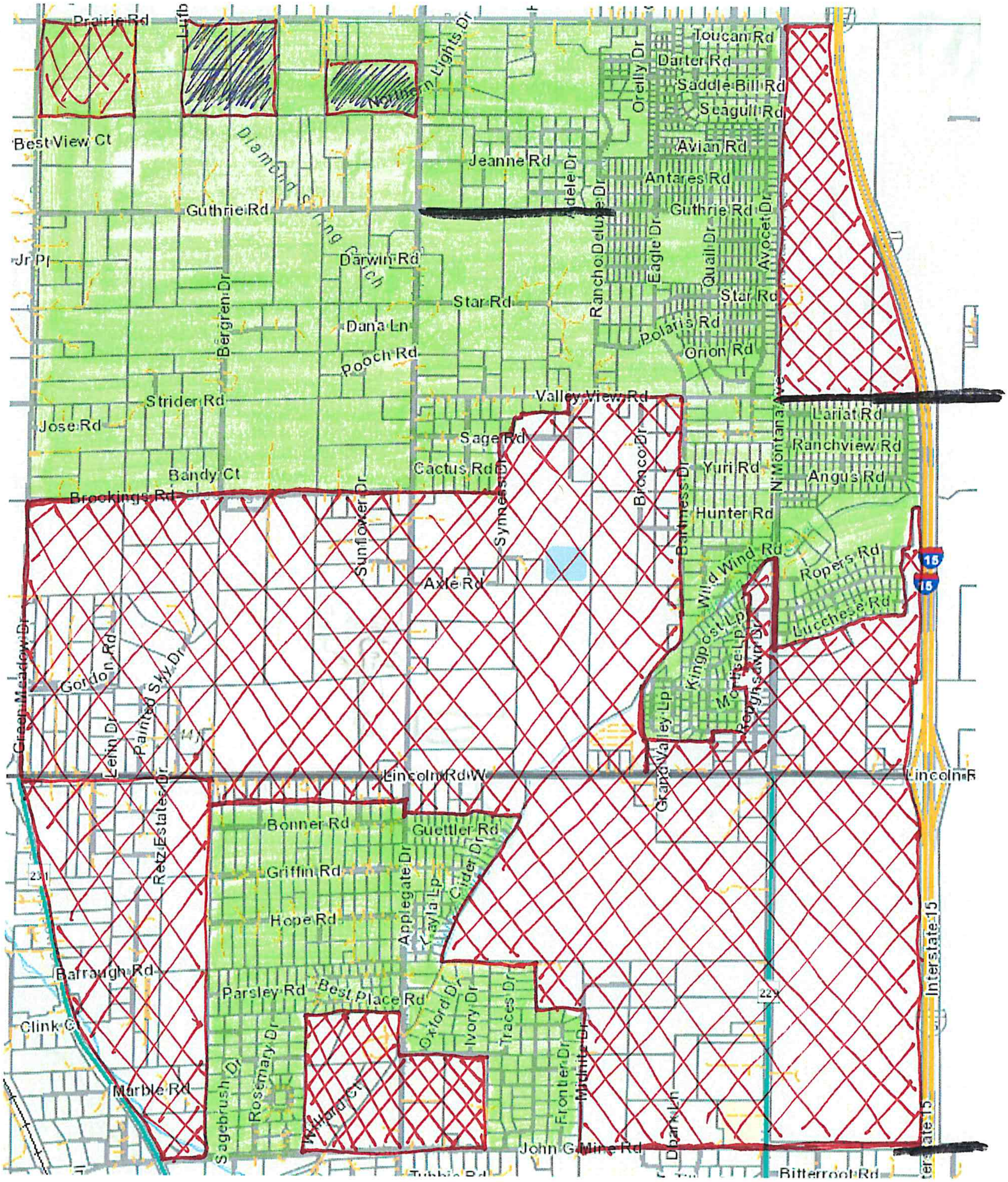
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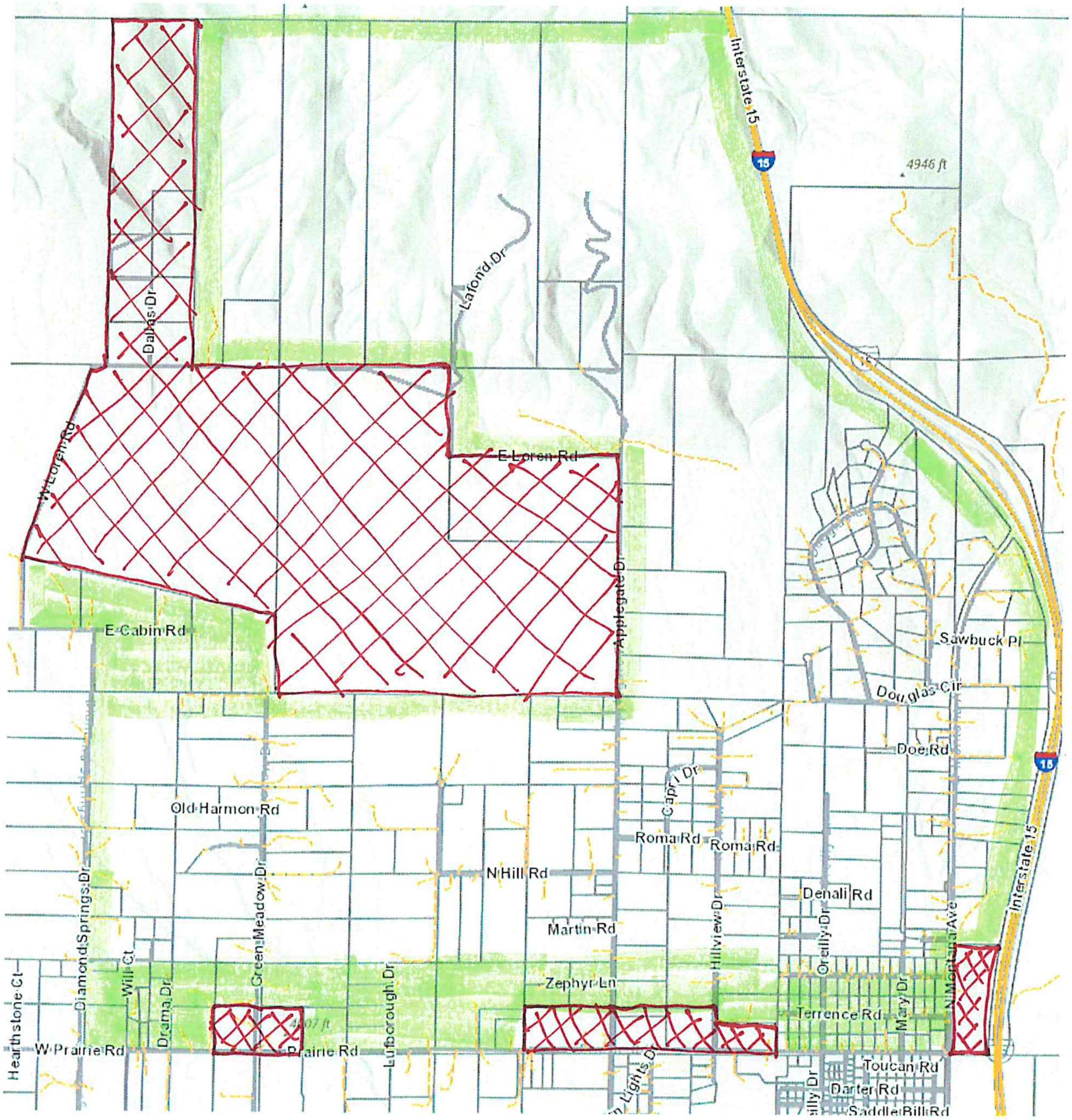
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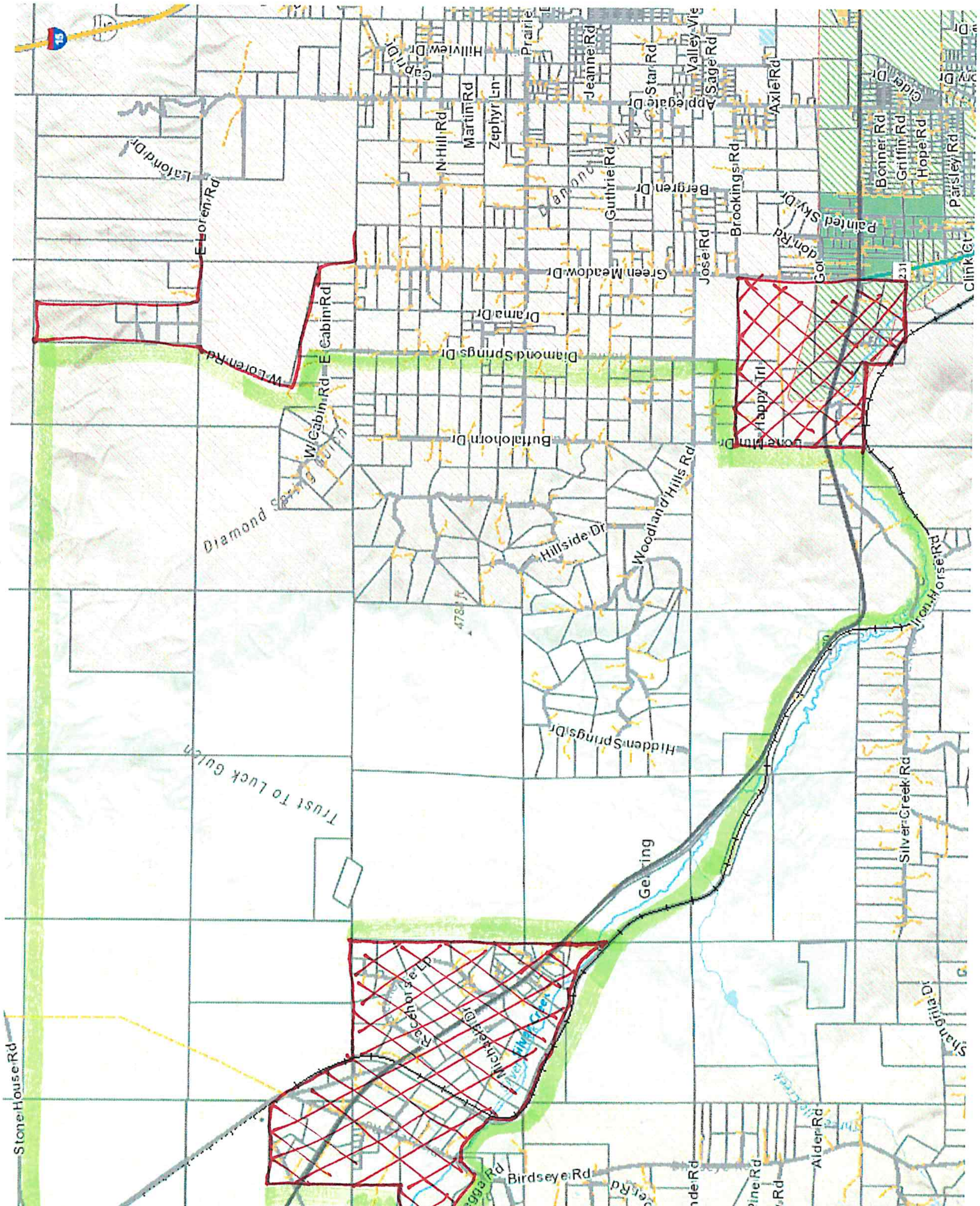
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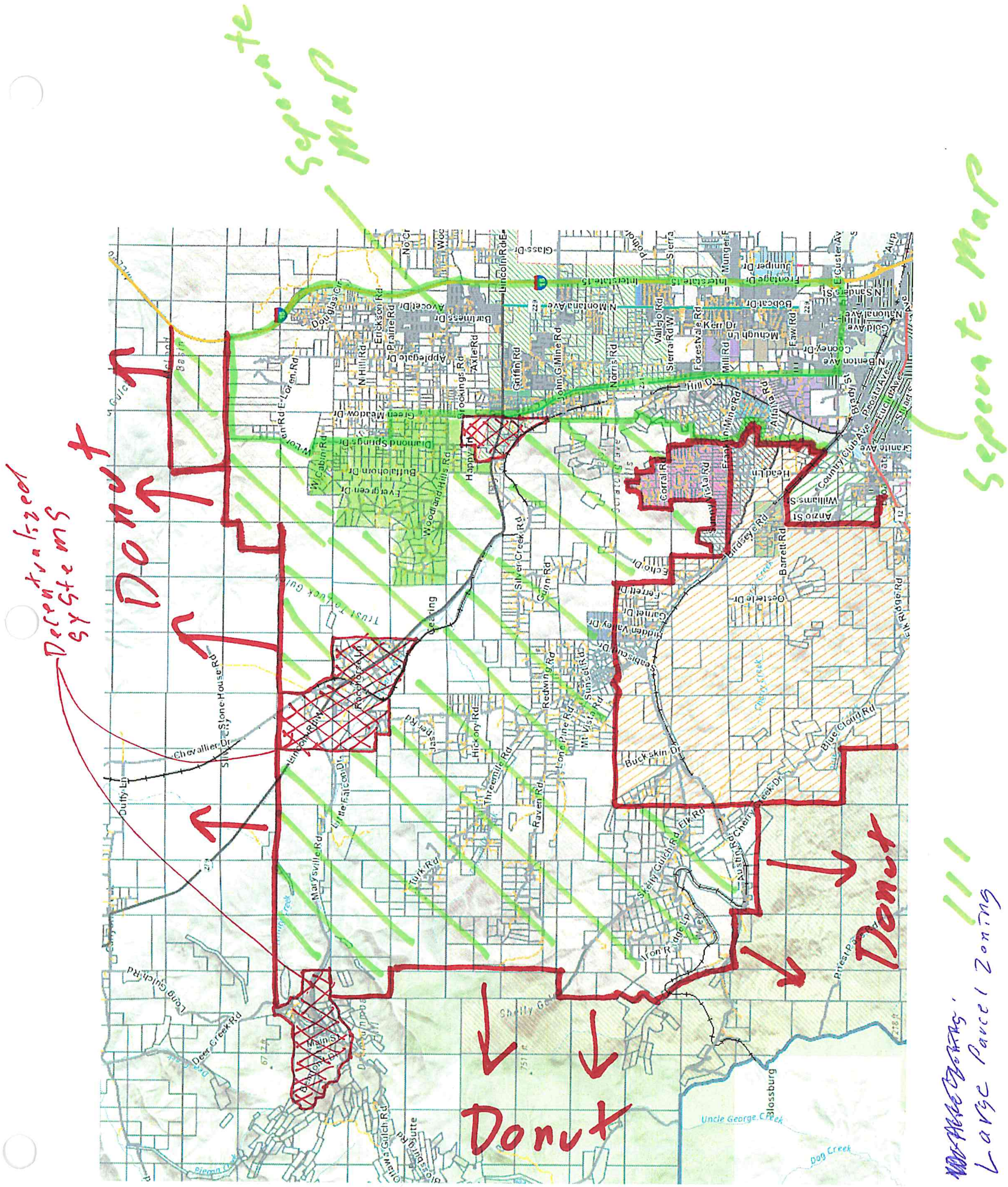
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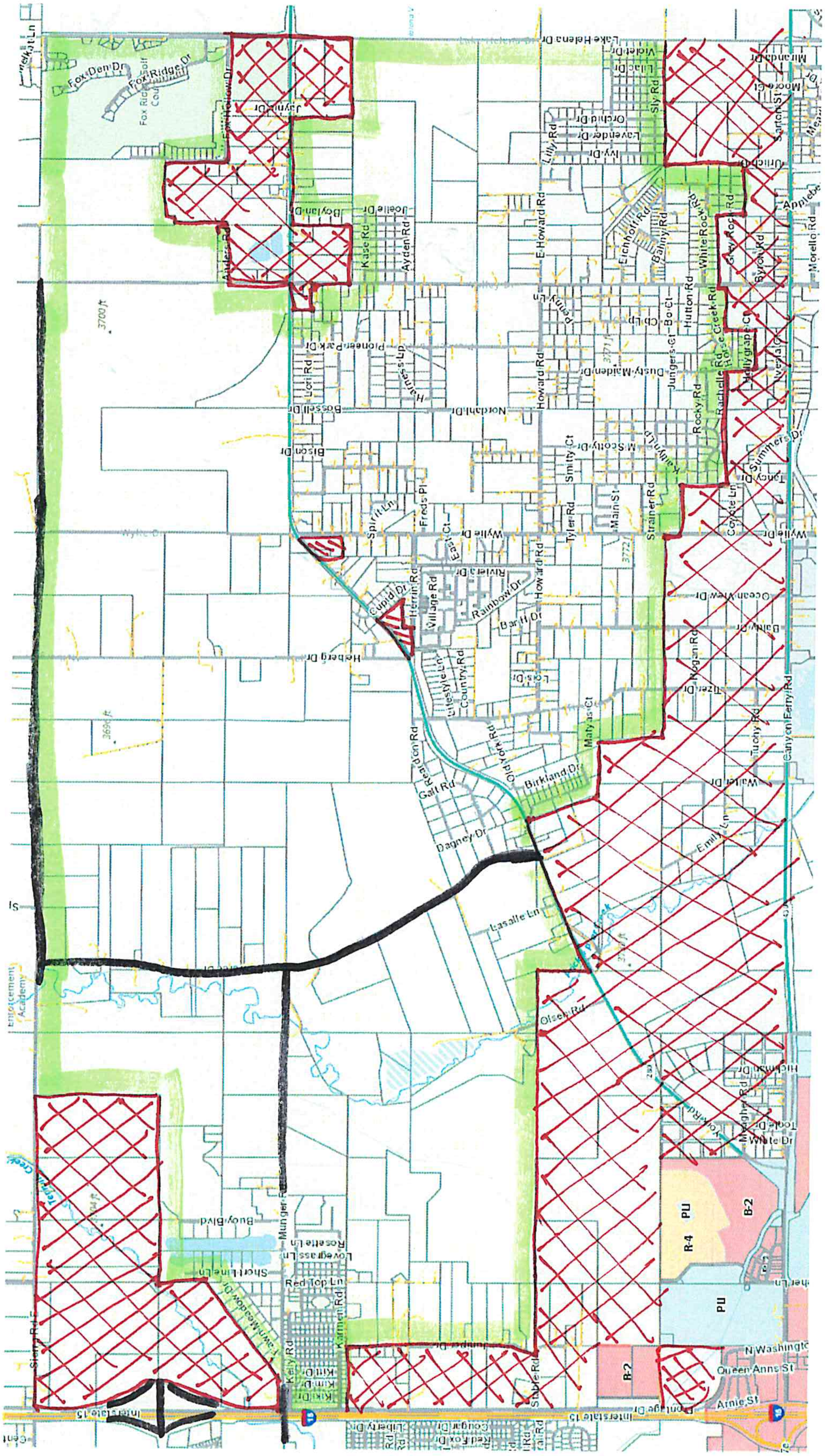
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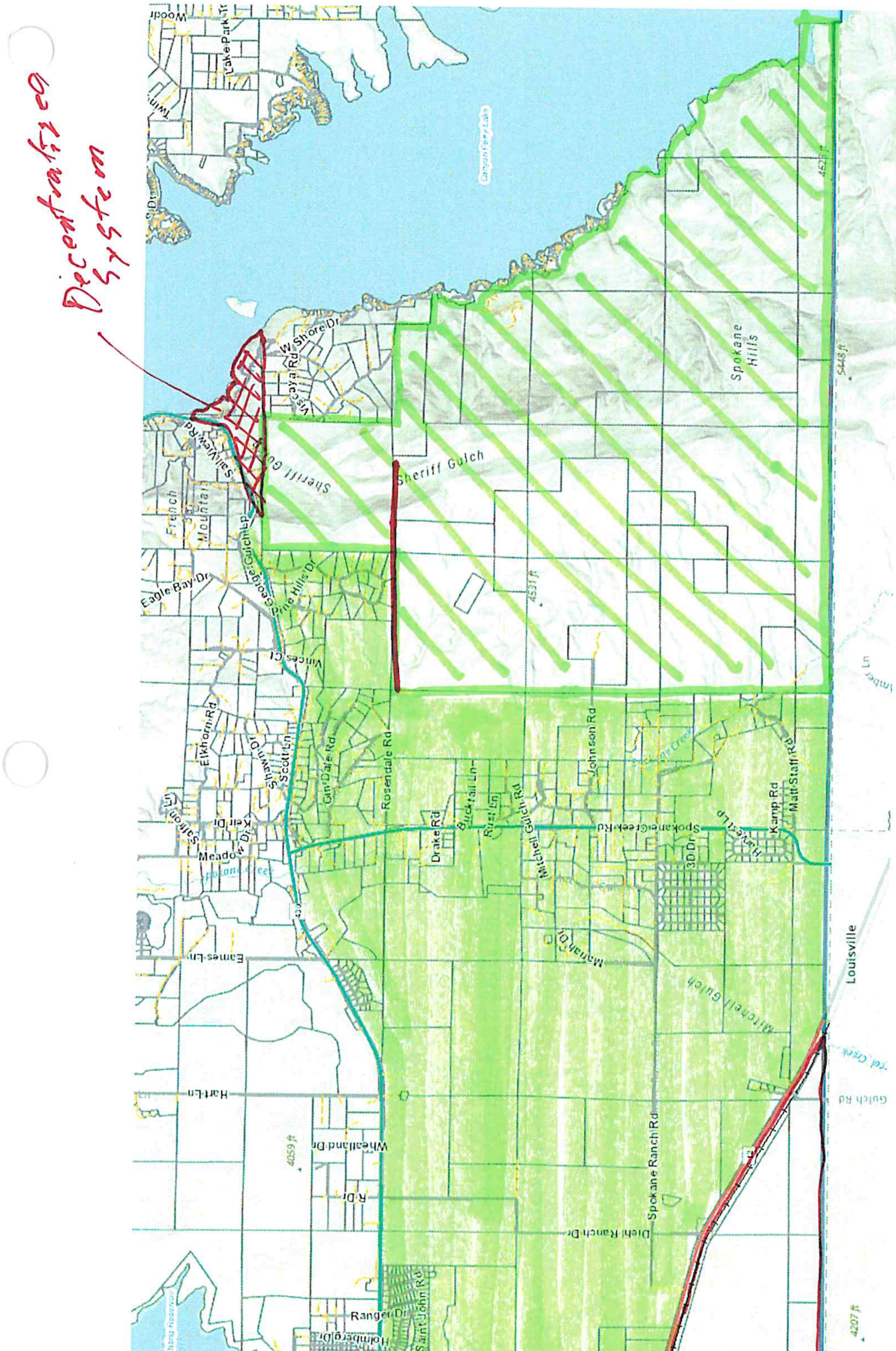
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Rosendale Rd
Drake Rd
Bucktail Ln
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Johnson Rd
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Kamp Rd
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Mitchell Gulch
Louisville
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Hart Ln
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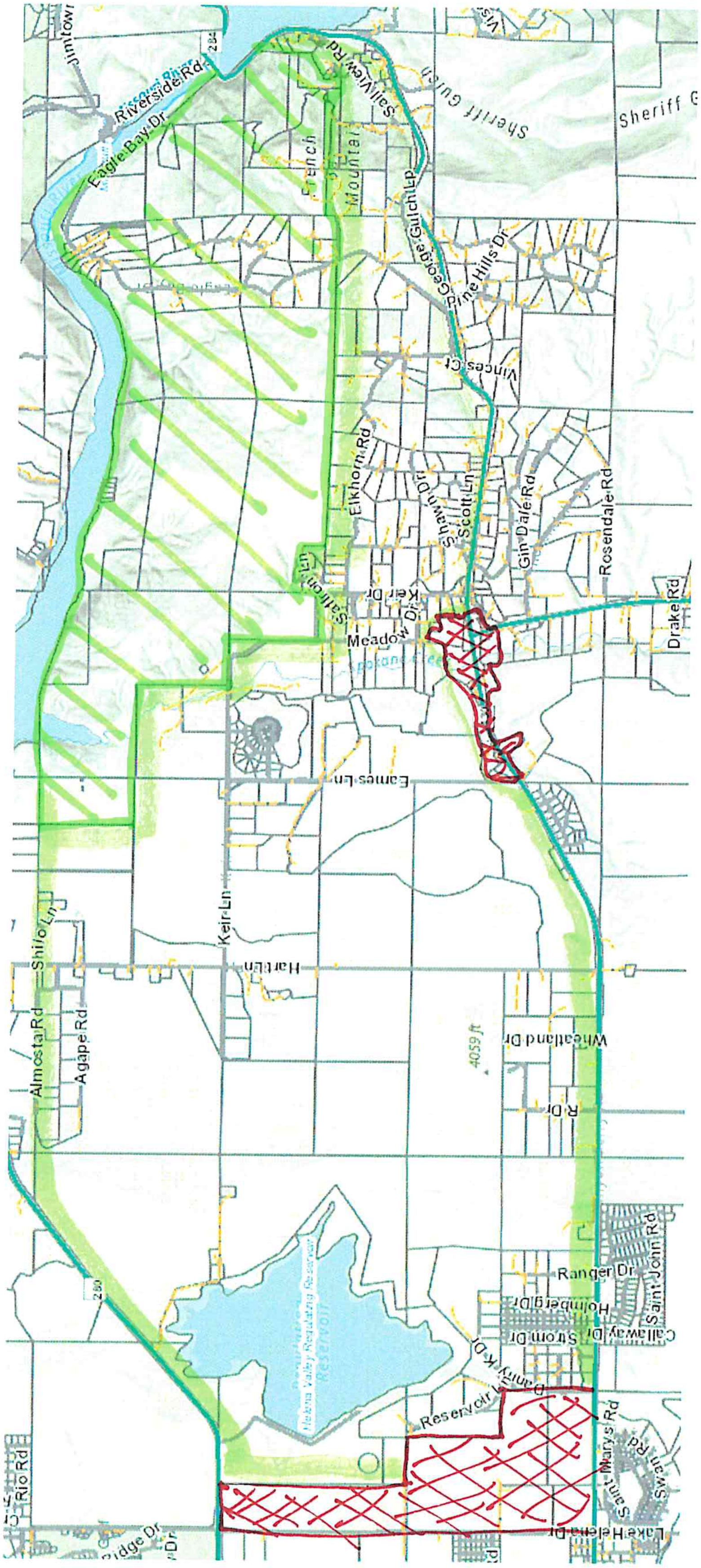
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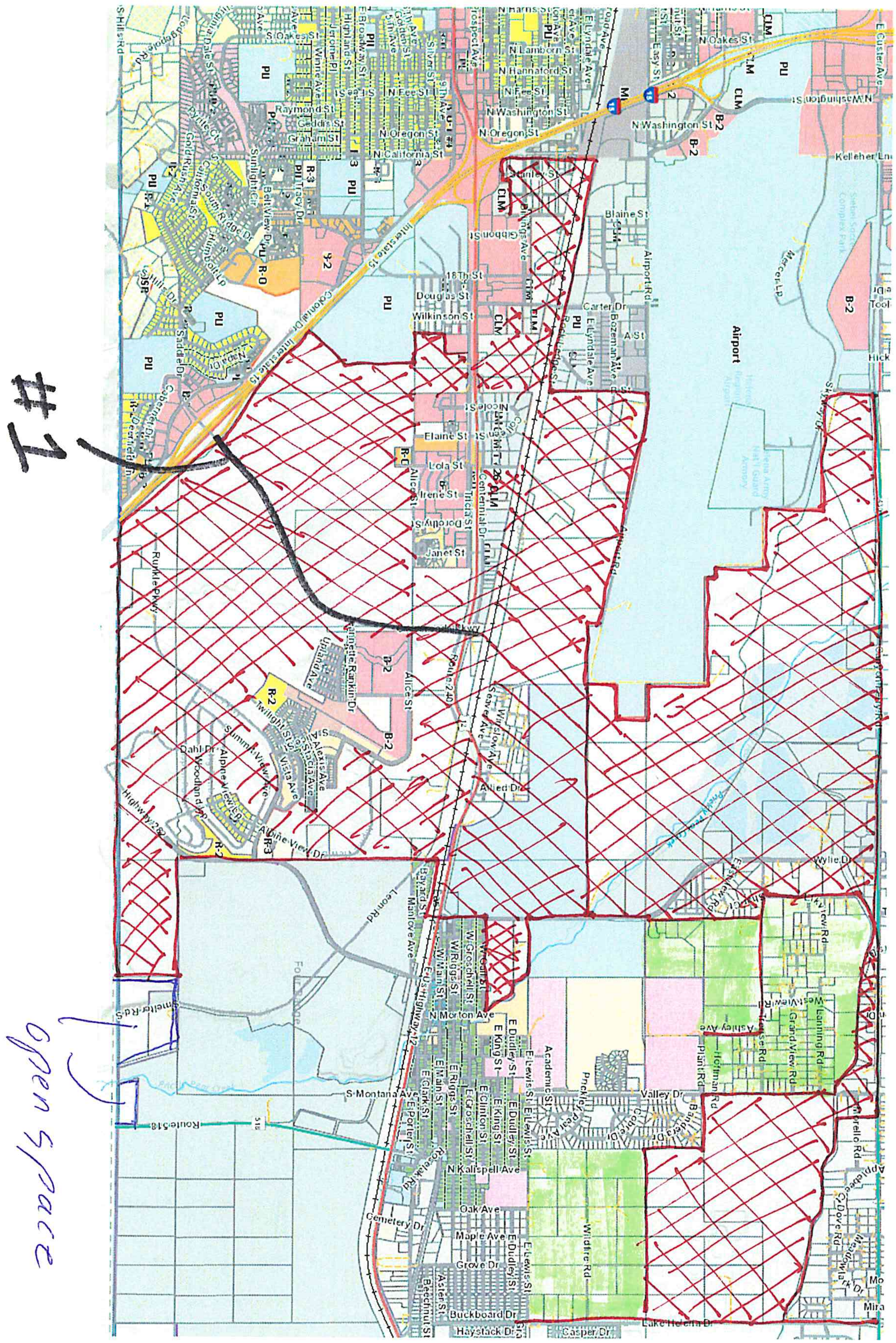
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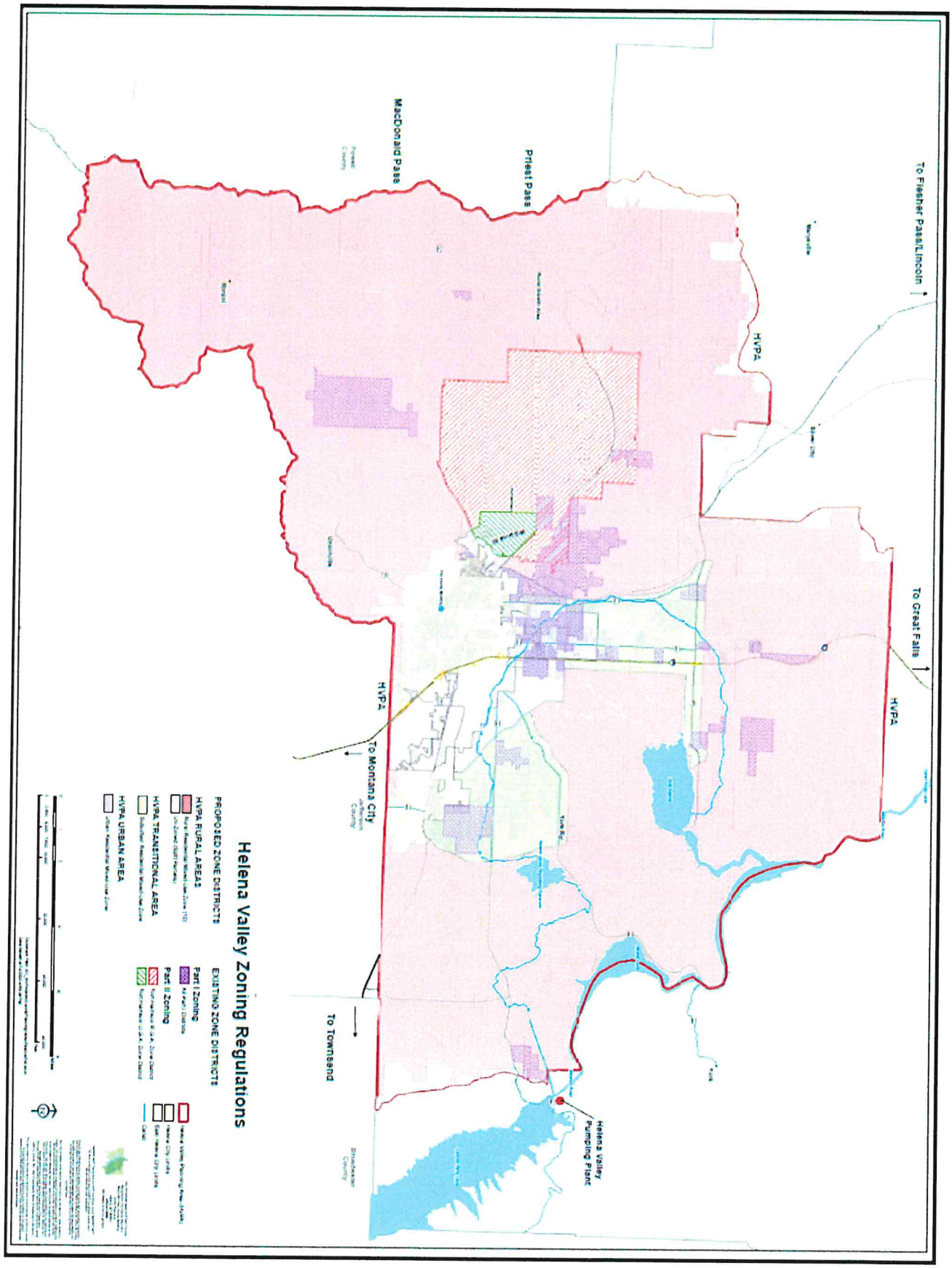
Helena Valley Zoning Regulations
PROPOSED ZONE DISTRICTS
HVPA RURAL AREAS
HVPA TRANSITIONAL AREA
HVPA URBAN AREA
EXISTING ZONE DISTRICTS
Part I Zoning
Part II Zoning
MacDonald Pass
Priest Pass
To Flesher Pass/Lincoln
To Great Falls
To Montana City
To Townsend
HVPA
Helena Valley Pumpling Plant

From:	Chris Stockwell
To:	eric.austin@montana.edu; County_Planning_Mail
Subject:	Fwd: Process suggestion for developing and critiquing ZAP zoning recommendations Attn: Greg McNally
Date:	Thursday, December 2, 2021 11:44:22 AM
Attachments:	EPA_essential_smart_growth_fixes_urban_suburban_2009_publicinput.pdf EPA_essential_smart_growth_fixes_rural_zones_2012.pdf Essential Smart Growth Fixes Summary.docx Urban Suburban Zone Checklist.docx

Greg and Erik,

Ignore and delete my previous emails on this subject. These emails helped me think through what I say here. The results of this thought are all in this email, condensed and better stated.

The resources attached suggest an efficient ZAP process that you could flesh out to complete the ZAP tasks for Urban Residential Mixed-Use Zone and the other zones. Please let me know if you can integrate the resources into the ZAP process to complete the assigned tasks. Please include this email and attachements 1 and 4 in public comments.

Scaffolding for Streamlining the ZAP Process:

1. Attachment 1, "Essential Smart /Growth Fixes for Urban Suburban Codes" (2009) provides expert zoning recommendations moderated by the EPA to improve urban residential mixed-use zoning proposals. Attachment 4 condenses Attachment 1 from 47 to 11 pages providing a printable checklist of zoning recommendations made in subsections of Attachment 1 titled "Steps to Implementation."
2. Using the Attachment 4 checklist, LCC planning could check off the FIXES already included in an LCC zoning code proposal, provide additional zoning code recommendations, and point out recommendations still in question. Knowing the areas that are in question would give the ZAP an efficient starting point for recommending zoning improvements to the Commission. ZAP can use the checklist and LCC Planner comments on the checklist to efficiently evaluate the entire LCC proposal for this zone.
3. LCC Planners and ZAP members could also analyze how well the zoning recommendations meet STEEP concerns. This is because the resources organize expert zoning recommendations by objectives stated as section titles. See Attachment 3. These objectives can be related to STEEP concerns, which are just more abstract zoning objectives, that are criteria for evaluating zoning recommendations.
4. ZAP could then efficiently repeat such a process for the Suburban Residential Mixed-Use Zone (Attachment 1) and the Rural Residential Mixed-Use Zone (2012) (Attachment 2) and the 10-acre minimum.

I am learning about my home of 16 years and Lewis & Clark County. It is important work on your part. Thank you for your services. Thanks also for the opportunity to observe the ZAP.

Chris Stockwell, 406-465-0706

Essential Smart Growth Fixes for Urban and Suburban Zoning Codes

United States Environmental Protection Agency

EPA 231-K-09-003
November 2009

ACKNOWLEDGEMENTS

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Cover Image: Van Meter Williams Pollack

CONTENTS

INTRODUCTION

Smart growth creates lively walkable places that bring businesses to the street.

Farr Associates

Across the country, state and local governments are searching for ways to create vibrant communities that attract jobs, foster economic development, and are attractive places for people to live, work, and play. Increasingly, these governments are seeking more cost-effective strategies to install or maintain infrastructure, protect natural resources and the environment, and reduce greenhouse gas emissions. What many are discovering is that their own land development codes and ordinances are often getting in the way of achieving these goals.

Fortunately, there is interest in tackling these challenges. As the nation's demographics change, markets shift, and interest in climate change, energy efficiency, public health, and natural resource protection expands, Americans have a real opportunity to create more environmentally sustainable communities.

To address these issues, many local governments want to modify or replace their codes and ordinances so that future development and redevelopment will focus on creating complete neighborhoods—places where residents can walk to jobs and services, where choices exist for housing and transportation, where open space is preserved, and where climate change mitigation goals can be realized. Many local governments, however, lack the resources or expertise to make the specific regulatory changes that will create more sustainable communities. And for many, model codes or ordinances can be too general for practical use or are often designed to be adopted wholesale, which many communities are unprepared to do.

To respond to this need, the U.S. Environmental Protection Agency's (EPA) Development, Community, and Environment Division (DCED), also known as the Smart Growth Program, has put together this document to help those communities that may not wish to revise or replace their entire system of codes and ordinances, but nevertheless are looking for "essential fixes" that will help them get the smarter, more environmentally responsible, and sustainable communities they want.

To find the changes that can be most helpful, DCED convened a panel[1] of national smart growth code experts to identify what topics in local zoning codes are essential to creating the building blocks of smart growth. This document presents the initial work of that panel. It is an evolving document, one that will be regularly revised, added to, and updated. It is intended to spark a larger conversation about the tools and information local governments need to revise their land development regulations.

The purpose of this document is to identify the most common code and ordinance barriers communities face and to suggest actions communities could take to improve their land development regulations. Given the effort and political will that is necessary to make any changes to local regulations, the suggested code provisions are separated into three categories:

- **Modest Adjustments:** Code suggestions in this category assume the local government will keep the existing regulations and is looking for relatively modest revisions that will help it remove barriers to building smart growth developments or create a regulatory framework where all development types are on equal footing. Examples include changing code language from minimum setbacks or parking requirements to maximums.

- **Major Modifications:** Code suggestions in this category assume the local government is looking to change the structure of the existing code. Suggestions include creating incentives for smart growth development or creating overlay zones and mixed-use districts.
- **Wholesale Changes:** Code suggestions in this category assume the local government wants to create a new regulatory framework, such as creating a form-based code or requiring sidewalks and alleys.

Every community is distinct, with different landscapes, natural resources, demographics, history, and political culture. Some communities have found that an incremental approach to code changes works best, while others have found success in wholesale change. This document strives to provide a starting point for all communities by recognizing their wide variability.

The document includes eleven Essential Fixes to the most common barriers local governments face when they want to implement smart growth approaches. Each Essential Fix describes the problem and how to respond, expected benefits, and implementation steps. Other resources include practice pointers and examples.

This tool does not include model language, nor is it intended to provide model codes or ordinances. The information here, however, can help communities evaluate their existing codes and ordinances and apply the information to achieve smart growth objectives. This document focuses primarily on barriers in suburban and urban communities. Similar issues regarding rural development will be addressed in a subsequent document that is under development. The intent is to continually revise, update, and expand the information provided here. Please send comments, feedback, or suggestions to the EPA project manager, Kevin Nelson, AICP, at nelson.kevin@epa.gov or 202-566-2835.

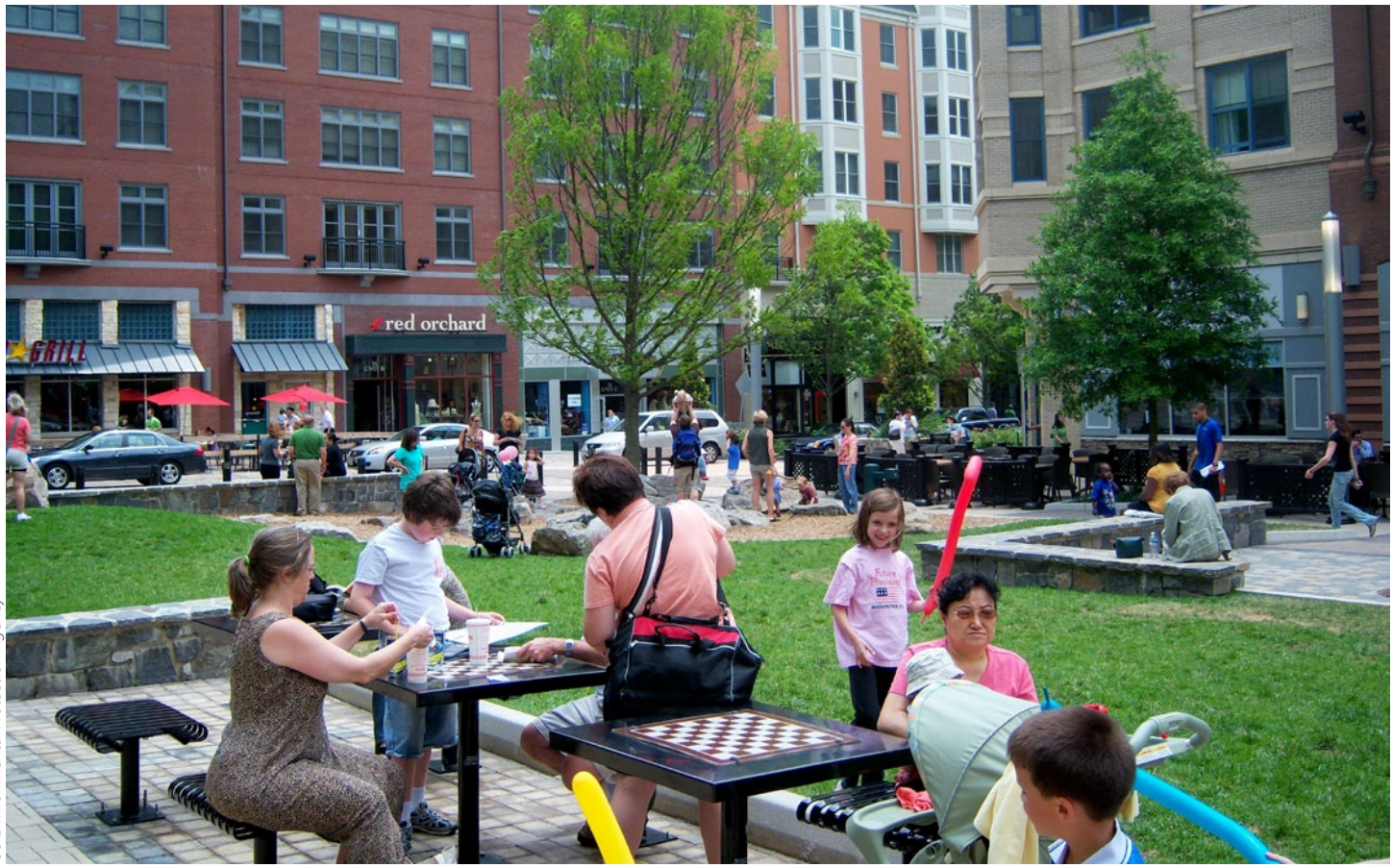
1 The panel met in January and October 2008. See the Acknowledgements for a list of participants.

1 ALLOW OR REQUIRE MIXED-USE ZONES

INTRODUCTION

A common problem with the conventional Euclidean zoning used by many communities is its focus on separating potentially incompatible land uses. This separation has made our development patterns inefficient, forcing residents to drive longer distances to get to their jobs, schools, shops, and services, which increases traffic congestion, air pollution, and greenhouse gas emissions. The underlying health and safety problems that zoning was designed to address 80 years ago—separating homes from factories, stock yards, and other "noxious" uses—are still important, but in our current economy, many commercial uses and workplaces can be integrated with homes without "noxious" effects. The health and safety goals of separating uses must now be placed in context with a range of other problems that are created by not allowing uses where they will be most efficient. Such separation can frustrate efforts to promote alternative modes of transportation and create lively urban places.

Rockville Town Square in Maryland contains a vibrant mixture of offices, residences, retail and gathering space for people to enjoy.



US Environmental Protection Agency

Mixed land use can integrate offices, retail and residences so that vehicular trips can be minimized.

RESPONSE TO THE PROBLEM

The response to this problem is to encourage or require more mixed-use zones. Mixed-use zones will look different in various contexts, from downtowns to transit-oriented development (TOD) to commercial corridors to the neighborhood corner store. Communities should be mindful of these variations so that there is not a "one size fits all" solution for how land uses are mixed to accommodate market conditions and design expectations. Requiring vertically mixed-use buildings, such as a building with ground-floor retail and offices or residences in the upper floors, along older, pedestrian-oriented corridors can reinvigorate a sleepy street. Alternatively, simply permitting a variety of uses within one zoning district allows a horizontal mix of uses that can break up the monotony of single uses, such as strip centers or single-family housing. This horizontal mix can make a street more interesting and bring stores, services, and workplaces closer to residents.

Farr Associates

EXPECTED BENEFITS

- Reduction in vehicle miles traveled, resulting in lower greenhouse gas emissions, lower commuting costs, and decreased road congestion.
- More balanced transportation systems that support walking, bicycling, and public transit, as well as driving.
- Livelier urban spaces with public gathering places and a variety of shops, restaurants, and entertainment.
- Complete neighborhoods where residents can live, work, and play.
- Diversity of housing for people of all incomes and at all stages of life.
- More vibrant commercial areas that provide retail and services for patrons.
- More compact development that helps preserve open space in outlying areas by reducing the need and demand for low-density, sprawling development.
- Efficient use of services and infrastructure, resulting in cost savings for the public.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Define mixed-use areas/activity centers in land use plans (on a neighborhood, community, and/or regional scale), and designate preferred locations for them.
- Permit residences in the upper floors of buildings in appropriate existing commercially zoned districts.

2. Major Modifications

- Remove obstacles to mixed-use development by creating zoning districts that allow mixed-use development by right (i.e., without the need for a rezoning or special discretionary approval process).
- Develop a variety of mixed-use districts, including vertical mixed uses and horizontal mixed uses, as needed. The context of uses (e.g., main street, neighborhood setting) is important for determining the type of mixed-use district.
- Designate mixed-use districts on the official zoning map.

3. Wholesale Changes

- Synchronize zoning codes and area plans to coordinate the location and development of mixed-use districts.

PRACTICE POINTERS

- Consider mandatory mixed-use development in preferred locations (e.g., near transit stops) to ensure that these prime locations are not used for low-density, single-use development.
- Adopt compatibility standards to ensure adequate transitions to adjacent, lower-density uses. Consider architectural, design, open space, operational, and other categories of transitional standards.
- Tailor development standards (such as parking, open space, and landscaping regulations) for mixed-use developments so as not to create unintended hurdles for this preferred development form. For example, typical parking requirements often do not reflect the reduced need for parking typical of most mixed-use developments. The additional land that such excessive standards require for parking can spread out growth so that lively, compact developments are hard to achieve.
- Use market studies to ensure an appropriate amount of commercially and residentially zoned land. Avoid requiring more vertically mixed uses than the market can support. Horizontal mixed-use districts can allow the market to determine the appropriate mix of uses. Establish standards for the development of each use within the area to ensure contiguous retail areas. In these locations, establish triggers such as achieving market benchmarks for renewed planning efforts as the area begins to change.
- Level the playing field for mixed-use developments. For example, make sure that single-use commercial strip developments are held to the same high design and other standards required of mixed-use developments.
- Create incentives for mixed-use development, such as a wider array of permitted uses in mixed-use districts (as opposed to single-use districts), increased densities, and accelerated application processing.

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2 USE URBAN DIMENSIONS IN URBAN PLACES

INTRODUCTION

Conventional zoning codes are typically replete with various dimensional standards that govern a range of topics, including minimum lot sizes and widths, floor area ratios, setbacks, and building heights. These standards are generally geared to produce low-intensity, low-rise residential and commercial development. Even codes for more mature urban areas often reflect this lower-density orientation. While this development pattern may be appropriate in some areas and under some circumstances (e.g., around environmentally sensitive areas), these standards often have unintentionally stifled more compact development in many cities and towns, preventing the development of attractive, lively, and cost-efficient places. Recalibrating dimensional standards can help accommodate and promote a more compact development pattern and create attractive urban environments. Changes in dimensional standards can also improve connectivity enhanced site planning and design. (See Essential Fixes Nos. 4 and 6 for street- and parking-related dimensional standards.)

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This street in the Georgetown neighborhood of Washington, DC exhibits a mature development of a city street.

RESPONSE TO THE PROBLEM

Cities across the country have been built based on the availability of land and proximity to jobs and amenities. Dimensional standards were established to accommodate these conditions. As communities and prosperity yielded larger lots and more spread-out development, communities began to reassess their function and design. A compact, walkable neighborhood is achieved through design and direction from codes and ordinances. A principal way of creating this type of place is through modifications to the dimensional standards—that is, the size of lots, setback requirements, height restrictions, and the like.

Form-based codes are a typical response for communities that are looking to increase options for compact form and walkable neighborhoods. Components of form-based codes include regulating plans, building form standards (building siting and height), and optional architectural elements. In essence, the form of the building is more important than the use that occupies it.

EXPECTED BENEFITS

- More compact development patterns that help preserve open space in outlying areas.
- Higher density development that supports transit and mixed-use activity centers.
- A more attractive public realm that is designed to balance pedestrians and bicyclists with the car.
- Cost-efficient provision of infrastructure and services.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Tailor dimensional standards in the development code to promote more compact development. Consider changing minimum standards to maximums.
  - For residential development, relevant changes could include lot width and area changes, smaller yards, increased lot or building coverage for smaller lots, increased height, and increased density.
  - For commercial or mixed-use development, relevant changes could include increased height, smaller yards and open space, increased lot or building coverage, and increased floor area ratios (FAR).
- Replace FAR with form standards such as height and maximum setbacks. Consider limiting building footprints in neighborhood commercial areas.
- Modify codes for commercial districts to allow residential development, especially over first-floor retail.
- Eliminate landscape buffers in the commercial area; there is no need to buffer like uses, such as two office buildings or a restaurant and a store, from each other.

2. Major Modifications

- Create incentives to provide multiple housing types in existing districts through dimensional standards (e.g., enable small lots and limited buffer yards between homes).
- Establish or reduce block lengths or perimeters to produce better connections and increase walkability.

US Environmental Protection Agency

Pedestrians traverse through a neighborhood park to reach homes and businesses that are built to the street line, creating appropriate dimensions for common open space amidst small lots.

- Adopt context-based or neighborhood-based dimensional standards that replicate existing, appealing, compact neighborhood patterns (e.g., narrow street width, sidewalks wide enough for safe and comfortable walking).
- Revise the codes for existing districts to encourage neighborhood redevelopment by applying new dimensional standards such as smaller lot requirements.
- Create districts for new compact building and development types that are not currently found in your community or neighborhood. (See the discussion of mixed use in Essential Fix No. 1.)

3. Wholesale Changes

- Coordinate new form-based dimensional standards, such as the siting of buildings, with zoning map changes to reflect the nature of form-based development versus use-specific zones.
- Plan a subarea of the community, then develop or calibrate and adopt a form-based code to create an option for additional compact, walkable neighborhoods.

PRACTICE POINTERS

- Where significant change in dimensional standards is proposed, create a computer model, preferably in 3-D (using ArcGIS or a similar program), of the existing standards in comparison to the proposed standards.
- Consider design and operational compatibility standards to ensure that new compact development is compatible with surrounding lower-density residential neighborhoods.
- Revise subdivision specifications and standards (e.g., narrower streets, reduced minimum driveway width) to encourage denser, more compact development.
- Relate dimensional standards to the transportation system (e.g., modify setbacks based on right of way instead of the street width).
- Replace standards that allow a variety of forms, such as FAR, with ones that provide a consistent benchmark, such as height requirements.
- Include other agencies, such as the public works or fire departments, early in discussions regarding efforts to revise dimensional standards.
- Analyze stormwater management requirements of denser developments, and consider green infrastructure approaches. (See Essential Fix No. 9.)

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3 REIN IN AND REFORM THE USE OF PLANNED UNIT DEVELOPMENTS

INTRODUCTION

The inflexibility of Euclidean single-use zone districts, inappropriate development and dimensional standards, and Byzantine approval processes have given rise to the use of negotiated developments in many communities. These negotiated developments usually take the form of planned unit developments (PUDs), planned developments, or master-planned communities. This discussion will use PUD as the collective term. PUDs allowed communities to overcome some of the strictures of Euclidean zoning and provided a vehicle for local government to negotiate community benefits such as additional open space, recreational facilities, better design, and contributions to infrastructure. PUDs, which spread rapidly after the concept was introduced in the 1960s, are attractive because they are often simpler and quicker than seeking multiple amendments and variances to an outdated zoning code.

Originally, PUDs were conceived of and used to allow flexibility in design standards to take advantage of site characteristics or to address community goals (e.g., clustering development to provide open space or protect sensitive natural areas). PUDs were meant to achieve higher quality developments and meet community goals better than the standard subdivision and

Whitaker Builders, Inc.

New Town in St. Charles, Missouri features is a planned unit development that encapsulates a variety of smart growth and new urbanism features including compact development, mix of land uses and design guidelines to create a distinctive place.

zoning regulations would allow. Sea Ranch in Northern California was a model of PUD, using attractive design to better integrate with the natural environment. Many of the initial Traditional Neighborhood Developments (TNDs) were approved through a PUD process.

Today, however, relatively standard subdivisions are being approved using PUDs as an alternative to rewriting zoning and subdivision regulations for time and cost considerations. PUDs allow communities to impose conditions as part of the approval, which cities use to ensure they receive the appropriate infrastructure, off-site improvements, and fees to offset development impacts. The initial objective of distinctive or attractive design, however, often is lost as part of the PUD process.

The PUD approach has now proliferated to the point that most projects of any size or significance are approved that way. Some observers estimate that upwards of 40 percent[2] of all residential units in the United States each year are approved through a PUD process, not conventional zoning. The result is that many growing cities are not the products of their land use plans and zoning codes, but rather the result of individually negotiated agreements. Indeed, in a growing number of communities, all major developments are being reviewed through the PUD process.[3]

As this trend proliferates, communities have increasingly recognized the downside of relying too heavily on PUDs and negotiated developments, including:

- There is significant uncertainty for developers, who have no standards to guide the development approval process, and for neighbors of proposed PUDs, who find that they cannot rely on existing zoning or land use plans and that the city planning staff controls much of the planning process.
- Project reviews can become longer, less efficient, and politically charged and can drag out for years.
- Major planning decisions are made with less public input into defining the community objectives prior to a development proposal.
- Environmental and design standards are often minimized in the process.
- Often this process creates an administrative nightmare for staff that have to deal with multiple mini-zoning codes created for each PUD, each of which differs on development standards and other requirements.
- The planning process becomes a project-by-project process rather than a comprehensive development review, and more of a political process than an evaluation of planning regulations and community goals.

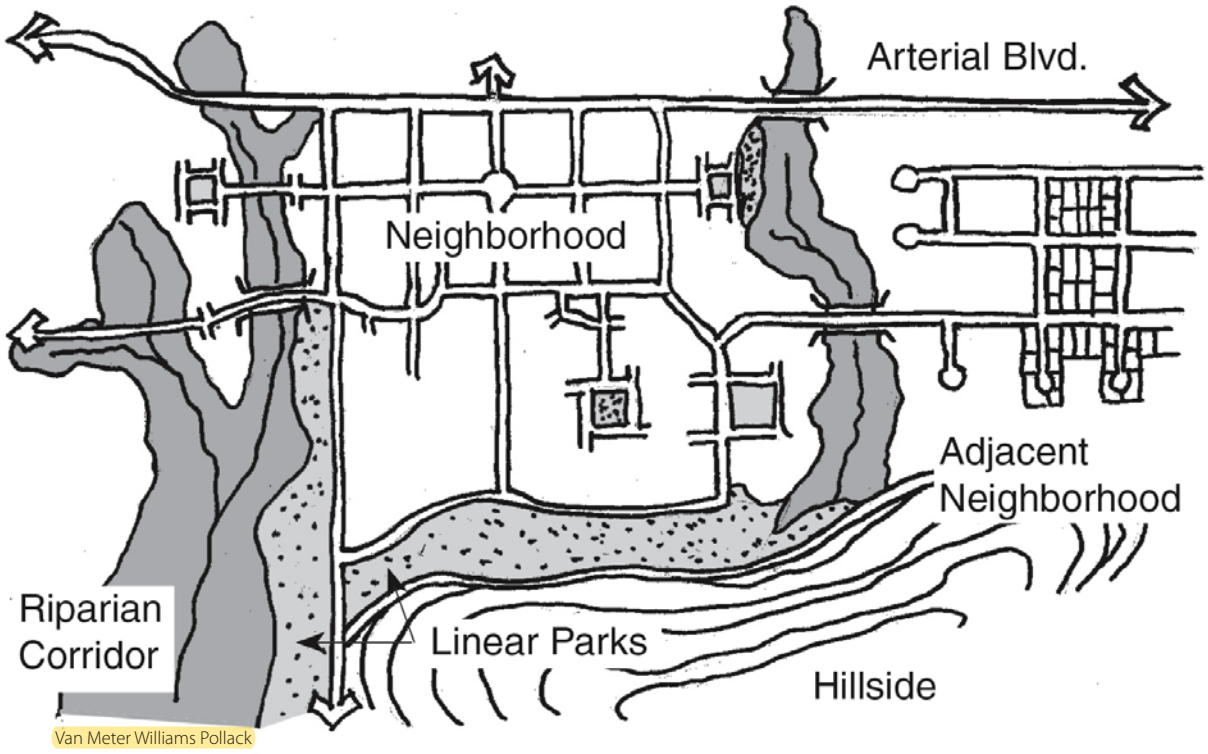
RESPONSE TO THE PROBLEM

To respond to these problems, communities are reducing the use of PUDs by updating their zoning districts and standards to accommodate preferred development patterns and types. They are also limiting the use of PUDs to larger projects that can provide compensating community benefits without waiving key design and environmental standards.

Communities are attempting to get out in front of PUD proposals by creating PUD zoning regulations or design guidelines. These are generally developed as part of a community design process so that the city can define its goals for a site or area prior to specific development proposals. Principles, regulations, and design guidelines are then used in conjunction with PUD zoning to provide clearer direction while allowing the desired design flexibility.

2 Duerksen, C. "Rural Smart Growth Zoning Code Tools." American Planning Association National Conference, April 28, 2009.

3 Ibid.



This drawing of the Belmar neighborhood shows how the development fits within the context of neighboring uses.

EXPECTED BENEFITS

- Increased certainty and predictability in the development review process while still allowing appropriate design flexibility.
- Setting the basic goals and fundamental standards for an area's development prior to a specific development proposal:
  - Creates an efficient design and review process and requires less staff time to administer the development over time.
  - Adheres to community growth visions and goals as established in comprehensive plans and gives the development sector clear direction on the quality, character, and fundamental elements the community wishes to see in any proposal.
  - Prevents important design and environmental standards from being waived or weakened in the PUD process.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Reform the PUD process to ensure that the parcel is designed appropriately given topography, adjacent uses, and additional impacts in the PUD-designated areas, and reduce the use of PUDs on small sites (under 2 acres).
- Remove or substantially reduce the need to use PUDs by fixing dimensional standards, particularly on small parcels. (See Essential Fix No. 2.)
- Create standards for PUD (e.g., apply Traditional Neighborhood Design policies, standards, and design guidelines as base PUD regulations prior to receiving development proposals).
- If PUDs are allowed, rein them in by establishing a minimum size for PUD projects, identifying specific allowable locations, and prohibiting waivers or other weakening of important environmental and design standards.

2. Major Modifications

- Prohibit PUDs as an alternative to following comprehensive plans and zoning codes. This may require communities to run public input processes to provide the detailed goals, objectives, and design elements for individual development proposals for larger sites. The community may also decide to rewrite its zoning regulations.

3. Wholesale Changes

- Create distinctive area and sector plans that give clear guidance to staff and the development community as to the vision and intended built-out of development. Complement these plans with accompanying zoning.

- Prior to accepting a development proposal for an area, communities should undergo a public master planning process to set goals and objectives; map land use and zoning; and set standards, regulations, and development quality through guidelines for the entire planning area.
- Implement an overlay district that allows the development of a site or area if specific standards are adopted. An example could be an overlay of the SmartCode or another set of development regulations onto an area designated in the comprehensive plan for future development.

PRACTICE POINTERS

- Consider establishing a list of compensating community benefits (such as a park, sidewalks, or trails) that the community expects in return for flexibility in uses, density, and other factors. This will reassure the community that they will get benefits from development and provide some certainty for developers regarding negotiated benefits.

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4 FIX PARKING REQUIREMENTS

INTRODUCTION

The parking standards found in many conventional zoning codes can be a significant barrier to lively, mixed-use developments and activity centers, especially in existing downtowns. Parking standards commonly in use in the United States often call for too much off-street parking and require all or too much of it to be provided on the development site. Also, many zoning codes do not allow consideration of alternative parking arrangements, such as shared parking or credit for on-street parking that can reduce the need for on-site spaces and help create a more attractive streetscape. Such regulations fail to recognize the difference between parking demand in various contexts.

Codes and regulations should enable adjacent uses to share parking as evidences by the demand or overlap in this chart.

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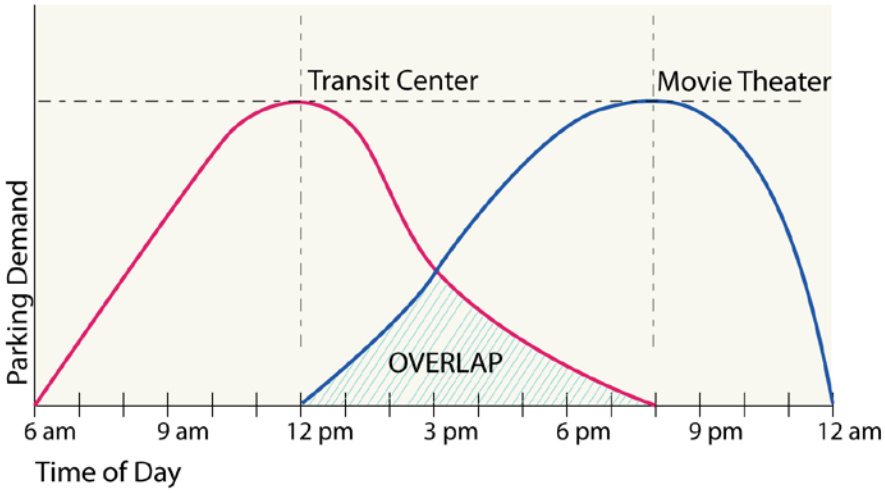
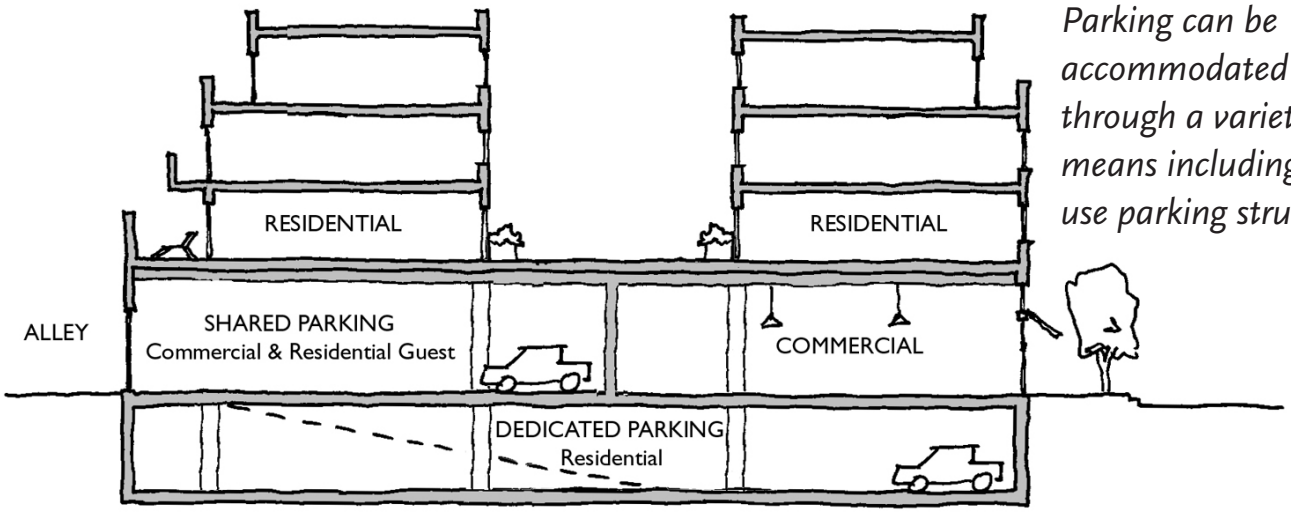


In many communities, the effect of conventional parking requirements is to make redevelopment of smaller parcels in older, mature areas infeasible and to make dense, compact, mixed-use development nearly impossible because of the code requirement for large expanses of surface parking or expensive structured parking. Large areas of surface parking in commercial areas discourage walking and actually increase parking demand by forcing people to drive between destinations. Frequently, zoning codes or development regulations allow (or even require) surface parking to be placed between buildings and the street, and they often allow parking structures to be built as stand-alone uses—both of which are deadly to vibrant, pedestrian-oriented places.

RESPONSE TO THE PROBLEM

Municipal governments across the country have been working to create more effective parking management systems for at least a couple of decades. The best parking management systems have these characteristics in common:

- They recognize that *too much* parking can be a serious issue, but so can *not enough* parking. Regulating parking supply became common in the first place because of the issues caused when developers provided inadequate parking and parking spilled over into nearby neighborhoods. What is generally needed is "the right amount" of parking, which can vary widely by place and by time. Good parking systems are carefully balanced to be specific to their settings and are adaptable to changes over time.



Parking can be accommodated through a variety of means including mixed use parking structures.

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- They recognize that parking policy must be well integrated with overall transportation policy and land use policy. Transit services, good bicycle facilities, and a great walking environment can reduce parking demand significantly. Mixed-use development coupled with good walking environments can reduce parking demand even further. However, these transportation options must be in place before reducing parking requirements. For example, it makes little sense to reduce parking supply so that people will ride the bus if transit service levels are too low to attract ridership.
- They take into account that parking is inherently expensive. Surface parking consumes valuable land, removing it from productive use. Structured parking incurs capital costs that can exceed $20,000 per space,[4] thereby subtracting capital funds from development. Successful parking management systems reconcile the cost of providing parking with local taxation and fees, with the fine schedule for parking violations, and with the fees charged for use of parking.

Successful municipal parking management systems generally incorporate some combination of the following strategies and measures:

- **Lower Parking Supply Minimums** – The minimum parking requirements in many local codes are based on demand studies conducted in spread-out suburban places. These studies reflect parking demand in settings where shoppers and workers do not or cannot walk or use transit. In mixed-use settings with good pedestrian environments, such regulations overestimate parking demand and have a self-fulfilling effect by making mixed-use development and redevelopment physically impossible.
- **Off-Site Parking** – In mixed-use environments, parking should be treated as a utility, not an on-site private activity. Requiring each landowner in a downtown to provide private parking on his or her parcel is akin to requiring each landowner to drill his or her own water well. Modern parking ordinances allow parking minimums to be met off site, although they may require that the parking location be within a maximum 600- to 1,000-foot distance from the development. These could be private joint parking facilities or public facilities owned by a parking district. The developer is still responsible for the cost of parking, either directly through capital fees or indirectly through property taxes. In some settings, it is feasible to "unbundle" parking from residential projects, allowing parking to be provided on the open market.
- **Fee-In-Lieu System** – In places where the city is providing public parking facilities or where a parking district has been created, provisions can be written that allow a developer to pay a set fee in lieu (FIL) of providing parking supply directly. The money from FIL payments is then used to expand public parking supply. It is important that any FIL fee schedule be realistic about actual costs of parking.
- **Shared Parking Credits** – Spread-out parking requirements assume that each business has its own separate parking supply and that it must be large enough to accommodate the peak hour of the peak day of the year. That assumption results in excessive parking. Different parking uses peak at different times of day—office parking in the middle of the day, retail in late afternoon and on week-

4 U.S. EPA. *Parking Spaces / Community Places: Finding the Balance Through Smart Growth Solutions.* February 2006. EPA 231-K-06-001. p. 9.

ends, restaurants in the evening. Shared parking provisions allow developers to reduce parking supply requirements when different uses can share the same parking spaces.

- **Parking Enforcement** – A pervasive cause of perceived parking shortages is the misuse of premium parking by employees. The closest, most convenient parking spaces—storefront, on-street parking in particular—should be protected for use by customers. Yet in many places, these spaces are occupied by employees' cars. Even where time restrictions have been established, they are often poorly enforced or the fines are too low to deter routine abuse. This situation can be corrected by ensuring there is adequate employee parking nearby and by adequately staffing enforcement.
- **Public Transit** – Many communities have reduced parking demand in mixed-use areas by improving transit service, especially for commuters. This approach is especially attractive because it reduces parking demand while improving mobility and access. Transit provides environmental benefits as well, including reduced air pollution and greenhouse gas emissions.
- **On-Street Parking** – The most valuable parking in most commercial and mixed-use places is parking on the street in front of businesses. Yet many cities are careless about keeping on-street parking or do not do enough to ensure the maximum number of spaces per block. Shifting from parallel to diagonal parking can increase parking supply by up to 30 percent per block face.

EXPECTED BENEFITS

- Lower cost of redevelopment and infill projects, helping them compete with outlying projects.
- Lively, active, economically strong mixed-use districts that are regional destinations.
- Increased tax base and tax revenues.
- Increased transit patronage that supports increased levels of transit service.
- More pedestrian-friendly environments.

STEPS TO IMPLEMENTATION

(Note: some of these measures are in support of code changes, but are not in themselves addressed through the zoning or land development code.)

1. Modest Adjustments

- Create a parking overlay district in the parking code for a downtown or other mixed-use area. Reduce minimum off-street parking supply requirements in the overlay district based on recalculated demand resulting from alternative transportation options, the mix of land uses, and a "park once" strategy that encourages parking in one place and walking to multiple destinations. Calculate a shared parking allowance based on the specific land uses in the overlay district.
- Develop residential parking permit provisions to help protect neighborhoods affected by overflow parking resulting from increased parking enforcement. Design the system to be applied in neighborhoods (not automatically citywide) based on criteria, such as the actual amount of on-street parking demand. Carefully manage and enforce the residential parking permit system to avoid abuse, such as sale of permits. Consider returning a portion of receipts from parking permit fees to the neighborhood in the form of street repairs and improvements. Consider selling "commuter permits" for residential streets in parking permit districts near mixed-use centers, with all or some of the revenue returned to the neighborhood in the form of capital repairs and improvements.
- Work with the public works department to increase the amount of on-street parking in a downtown or other mixed-use center. Convert parallel to diagonal parking where feasible. Evaluate parking stall specifications (length and width) and reduce them if possible to increase parking supply.
- Establish (in the code) authorization for parking advisory committees for specific areas where parking issues are controversial. Provide for the appointment of a cross section of stakeholders, including businesses and residents. Charter the committee to advise on parking studies and on potential changes to parking ordinances.

2. Major Modifications

- Undertake a comprehensive revision of the parking ordinance. Some specific revisions might include:
  - Revise the tables of parking supply minimums, reducing them wherever possible to reflect context, transportation options, and land use mix.
  - Develop a system of shared parking credits, either as a set percentage in connection with form-based codes or based on the land use mix in connection with zoning.

- Create parking overlay districts for downtowns and mixed-use centers, and write provisions for future additional overlay districts.
- Unbundle parking from residential development in districts with higher densities and a mix of uses.
- Allow off-site parking in dense retail districts and set limits for its distance from development sites.
- Develop provisions to govern joint parking (i.e., parking allowed through contracts or leases with other businesses or landowners) to ensure that parking supply commitments made in connection with development approval are honored and maintained over time.
- Allow some credit for on-street parking supply in retail districts. Allow for substitution of a form-based code in certain zone districts to simplify and eliminate the need for more detailed parking regulations.

- Overhaul the parking enforcement system. Improve enforcement of parking time limits by acquiring hand-held computers for issuing tickets (replacing a system of chalking tires). Revise the parking overtime ordinance to provide escalating fines for scofflaws (repeat offenders) and set fines at levels that deter abuse. Increase enforcement levels so that probability of being ticketed for overtime parking approaches certainty. Evaluate parking supply in and around parking overlay districts and identify parking supply to be available for commuter parking use. Develop a Residential Parking Permit (RPP) system to help protect neighborhoods impacted by overflow parking resulting from increased parking enforcement.

3. Wholesale Changes

- Work with the local or regional transit agency to develop a commuter transit pass that is bundled with a parking permit in parking districts and paid for with proceeds from the district's revenues, including tax revenues. Use this "universal pass" to increase transit patronage while managing commuter parking demand.
- Institute paid parking for public parking supply in parking districts. Start with off-street, publicly owned parking. Pay kiosks for on-street parking can reduce streetscape impacts such as visual clutter from individual parking meters, are more efficient, and are more convenient for customers.

PRACTICE POINTERS

- Implement design standards for parking structures.
- Tailor parking standards for infill areas as opposed to greenfield sites (e.g., fewer, smaller spaces in infill).
- Provide priority parking for hybrid or alternative-fuel vehicles to encourage use of these vehicles.
- Consider requiring a portion of the parking lot to be constructed of pervious materials.

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5 INCREASE DENSITY AND INTENSITY IN CENTERS

INTRODUCTION

Density is probably the most discussed and least understood concept in urban planning. Residents and elected officials routinely see the amount of development (e.g., the number of dwelling units, the square footage of commercial space) allowed on a site as one of the most important consideration in local planning. "Too much" density is often seen as the cause of traffic congestion, ugly buildings, loss of green space, crime, and many other ills. However, increasing the average density of infill, redevelopment, and greenfield projects is crucial to improving the quality of life in the community. Higher density is important to protecting open space and supporting transportation options like transit, walking, and biking. Furthermore, EPA research[5] shows that higher densities may better protect water quality—especially at the lot and watershed levels.

US Environmental Protection Agency

As a development center, the Ballston neighborhood of Arlington, Virginia has been designated to accommodate additional growth.

5 U.S. EPA. *Protecting Water Resources Through Higher-Density Development*. 2006. EPA 231-R-06-001.

Much of what people dislike about density is in reality the result of development patterns that help to increase congestion on arterials, single-use areas that emphasize driving to get to destinations, and dense developments that are poorly designed. And, unfortunately, many people associate density with poorly managed rental or affordable housing developments. Fear of lower property values is often an underlying concern of residents when discussing higher density developments.

Density itself does not determine the quality of development. Many high-density areas, in fact, are the most desirable areas in a region, such as Dupont Circle in Washington, D.C., and the Chicago suburb of Oak Park, Illinois. These areas are attractive because the density is well designed, with appealing streetscapes, mixture of uses, site planning, and building design. Despite the multiple benefits that can be derived from projects with higher densities, gaining political approval for higher density projects is often difficult and controversial.

Desire for privacy, feeling crowded, fear of crime, parking, and compatibility with the character of the community are often the issues that residents cite as concerns with more dense developments. Identifying techniques and requirements to ensure that higher density projects are compatible with existing neighborhoods will help respond to these concerns.

RESPONSE TO THE PROBLEM

The concept of density requires ample discussion and education to allay misconceptions and correct misunderstandings about its purpose and benefits. Increased density creates the customer base needed for transit, retail, and amenities residents want. Residents of less dense communities may ask, "Why can't we have the amenities that that community has?" Often, the answer is that the other community is denser. The benefits and resources discussed in this section provide the foundation for a complete community, one that needs increased density to thrive.

Communities need to address density in a comprehensive manner rather than project by project. There are a number of strategies and tools that communities may use to decide which parts of their community should be densest. Through the comprehensive or general plan process, the community should target areas that have the character and infrastructure to support higher density development. Communities should ensure that higher density developments go into mixed-use areas that will allow walking and biking to shops and services, which reduces driving and can minimize parking requirements. Lastly, communities should focus much of their higher density where it can be served conveniently by bus or rail transit, which will also reduce the need to drive and provide other environmental benefits.

These policies can be implemented through new mixed-use or transit-oriented development (TOD) districts, changes in zoning designations, or modifying zoning to allow greater density in existing districts. Other strategies include creating new compatibility standards and design guidelines to improve transitions between higher density development and low-density neighborhoods.

EXPECTED BENEFITS

- Less pressure to expand development to outlying areas, thus protecting agricultural lands, natural open space, bodies of water, or sensitive habitat.
- Buildings and developments that use less energy, less land, and typically less materials. Because of the more efficient buildings and the transportation options that reduce the need to drive, residents generate fewer greenhouse gases per capita.
- More diverse communities with more opportunities for affordable housing, particularly in areas that have high land values and scarce development sites.
- More effective transit service. In lower density neighborhoods, seven to eight units per acre is the minimum density necessary to support transit service.[6]
- Support for local shops and services that rely on customers who can walk or bike from surrounding neighborhoods.

6 Dittmar, H. and Ohland, G. *The New Transit Town*. 2003.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Set minimum (as opposed to maximum) densities in general or comprehensive plans and zoning districts. This tool helps creates neighborhoods that are close-knit and vibrant and helps achieve benchmarks for citywide housing policies and goals.
- Designate locations for higher density development centers in comprehensive plans.
- Create activity center districts with higher densities, increased heights and FAR, and reduced parking requirements. This can be done by creating specific zones, modifying existing zones, or creating a new overlay district that allows selective modification of existing zoning regulations in an already zoned area without changing all of the zoning of a parcel.

2. Major Modifications

- Tailor development standards (e.g., height limits and FAR, parking requirements, and open space and landscaping regulations) to accommodate denser developments. Urban-style projects should not be evaluated based on low-density development standards.
- Rezone areas designated as activity centers based on comprehensive plans to increase density, as opposed to using case-by-case rezoning.

3. Wholesale Changes

- Use a redevelopment agency to purchase difficult-to-obtain or critical parcels. This is particularly effective with areas such as corridors, which often have smaller parcels that require aggregation to allow higher density development.
- Establish minimum densities or intensities in community or regional mixed-use centers and transit-oriented developments.
- Use height, placement, coverage and perviousness requirements, rather than FAR, to regulate structured parking. For example, do not count structured parking toward FAR if it is screened from view with retail, residential or office structures, or is constructed above the ground floor of a structure.
- Parking can be a costly component of development. Parking may be reduced as part of a TOD or a mixed-use, high-density district. Parking may also be "unbundled" from the residential units, which allows residents to choose not to purchase parking. (See Essential Fix No. 4.)

US Environmental Protection Agency

The Back Bay in Boston, Massachusetts serves as a center for commerce, housing and other activities. The intensity of resources here minimizes pressure to develop elsewhere because of available infrastructure and services.

- Set parking maximums rather than minimums to discourage too much parking supply for a development. This will allow higher density development, as parking often limits a project's overall density.

PRACTICE POINTERS

- Density is context sensitive; different levels of density will be appropriate in different places.
- Adopt site and building design standards for higher density projects to ensure high-quality, attractive development.
- Consider offering density bonuses and flexible zoning standards to encourage construction of affordable housing. Many jurisdictions have developed density bonuses, as well as allowable concessions or variances for specific regulations, as an incentive for affordable, senior, or disabled housing.
- Designating a buildable envelope rather than specifying density allows flexibility in the number of units, which creates greater density while controlling variables such as height and setbacks.
- Adopt transition/compatibility standards (e.g., building setbacks, open space, landscaping) to ensure that higher density projects in activity centers are compatible with surrounding neighborhoods.

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6 MODERNIZE STREET STANDARDS

INTRODUCTION

For several decades, municipal decisions about the size and design of streets have been based primarily on traffic capacity considerations. This narrow focus overlooks the fundamental role that streets play in shaping neighborhoods and communities. Streets are an important use of land. The design of streets influences the character, value, and use of abutting properties, as well as the health and vitality of surrounding neighborhoods. Street design also determines whether the area will be walkable, whether certain types of retail will be viable, and whether the urban landscape will be attractive and comfortable or stark and utilitarian. These impacts, in turn, affect land values (and associated tax receipts) and overall economic strength and resiliency. The character of streets can discourage or encourage redevelopment, hasten or reverse urban flight, and add or subtract value from abutting property. These are obviously important policy considerations for any municipality.

Street design also affects environmental factors, including the volume of stormwater runoff, the water quality of that runoff, and the magnitude of the urban heat island effect. Street trees are particularly important: they remove carbon dioxide and certain pollutants from the air; they intercept and absorb rain before it reaches the street; they shade the landscape, reducing ambient air temperatures in warm months; they add aesthetic value to neighborhoods; and they slow traffic, improving public safety.

Cities and towns have tended to make planning and design decisions about streets one project at a time and based on a limited perspective of specific sections of specific streets. This narrow perspective ignores the fact that transportation systems are comprised of networks of facilities. The macro-scale characteristics of *networks* are more important than the micro-scale design of specific street sections in determining how well a local transportation system functions (including how much capacity the system has).

This conventional project-by-project perspective has resulted in poorly connected networks of oversized streets, rather than well-connected networks of smaller streets. The resulting connectivity problems have been exacerbated by the national trend, beginning in the 1920s, of letting developers make network layout and connectivity decisions for streets built as part of their subdivisions and commercial sites. The inevitable outcomes have been poor connectivity, inconvenient circulation, and over-crowded arterials. These outcomes, in turn, have been detrimental to emergency service response, access to existing businesses, and neighborhood walkability.

The issues around street design and network connectivity have been further compounded by oversimplified and unsupported theories about traffic safety. In recent years, transportation engineering analysis has shown that street width; the size, proximity, and orientation of buildings and street trees; the configuration of intersections; and the presence of on-street parking all have significant effects on the speed and attentiveness of drivers. Designed properly, these elements can reduce both accident frequency and accident severity.

Clearly, there is a need for communities to update their approach to planning, designing, and building streets and street networks.

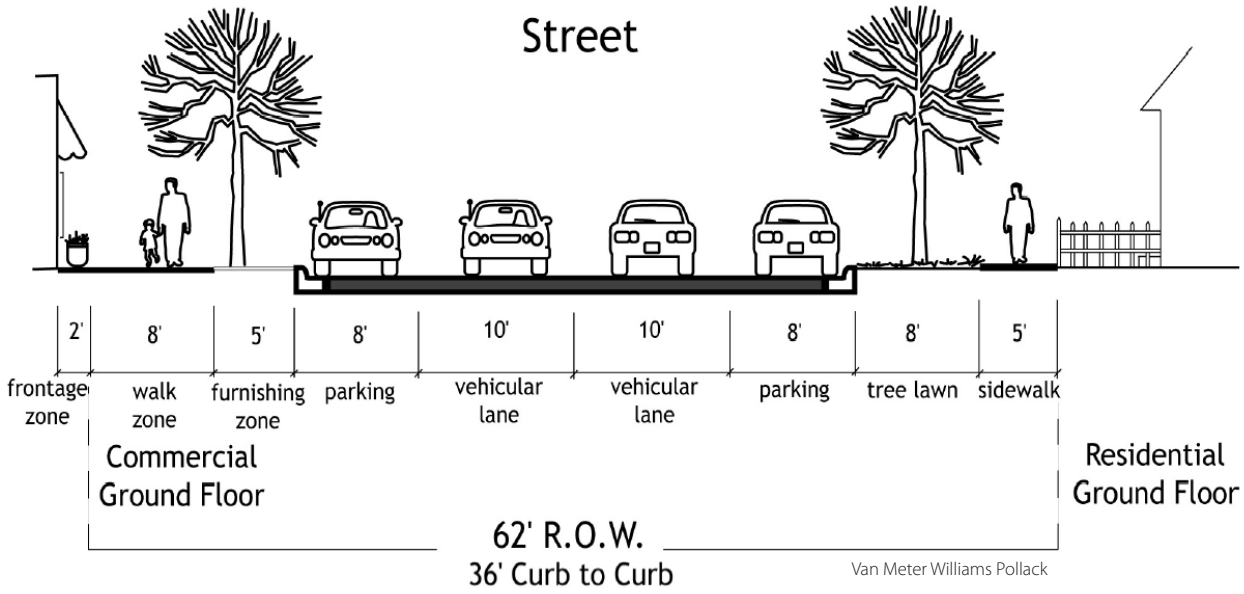
Van Meter Williams Pollack

This view of University Boulevard in Palo Alto, California includes amenities for cars and bikes.

RESPONSE TO THE PROBLEM

Generally, cities have addressed street design issues through subdivision regulations rather than zoning ordinances, although that varies depending on the local regulatory structure. Form-based codes can provide a foundation for street design and, to a lesser extent, for connectivity, but additional design details and procedural requirements will be needed. The primary techniques that cities and towns are implementing to improve street design include:

- **Complete Streets** – Streets should be designed to serve all modes of travel equally well—pedestrians, bicycles, personal vehicles, and transit.
- **Narrow Local Streets** – Local streets (streets that primarily provide access to abutting properties, as opposed to streets that primarily serve pass-through traffic) should be no wider than absolutely necessary.
- **Context-Sensitive Thoroughfares** – Arterial and collector thoroughfares should be designed to fit the character of abutting lands and surrounding neighborhoods and should not be overly wide or designed to encourage inappropriate vehicular speeds.
- **Pedestrian-Oriented Environments** – Streets should be walkable—safe, attractive, and convenient for pedestrians, including people walking for utilitarian purposes as well as people strolling and exercising.
- **Universal Design** – Pedestrian facilities should be designed to be convenient and safe for a wide variety of people, including persons with disabilities, elderly people and children, people pushing strollers, and strong, fit pedestrians walking quickly.
- **Green Streets** – Streets can be designed with features that manage stormwater and protect water quality by reducing the volume of water that flows directly to streams and rivers; using a street tree canopy to intercept rain, provide shade to help cool the street, and improve air quality; and serving as a visible element of a system of green infrastructure that is incorporated into the community.
- **On-Street Parking** – On-street parking is not only a convenient way to add value to properties in mixed-use districts. It can also be a design strategy to make streets safer and more appealing for pedestrians.



This street section show the typical array of uses for a right of way including pedestrians and automobiles.

Many communities, along with state departments of transportation, are addressing network connectivity issues by changing their land development codes and subdivision regulations to require minimum connectivity in new development and in redevelopment. To be effective, these standards must address both external connectivity (how well connected a development is with the larger street network) and internal connectivity (how well the land uses in the development are connected with each other). The most commonly used connectivity regulations establish standards for:

- Maximum block length and circumference or block area;
- Minimum intersections per linear mile of roadway or per square mile of area; and
- Connectivity Index (the number of street links divided by the number of intersections).

EXPECTED BENEFITS

- Improved safety for drivers, pedestrians, and bicyclists.
- Reduced environmental footprint, including less stormwater runoff, less of a heat island effect, and less land consumed.
- More walking and biking with attendant health benefits.
- Value added to abutting properties and surrounding neighborhoods.
- Increased tax base and tax revenues.
- A more attractive city or town with more economic vitality and resiliency.
- A more flexible, adaptive network to help avoid congestion.
- Improved emergency response and emergency evacuation capability.
- Reduced street maintenance costs.
- Allowing people to drive less with no reduction in mobility.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Revise the local street design standards to add a "road diet" cross section for appropriate streets that currently have four general purpose lanes with no on-street parking, no bike lanes, inadequate pedestrian space, or any combination of these deficiencies. Set criteria for conversion to three lanes (two general purpose lanes and a two-way left turn lane) with either bike lanes or on-street parking and improved pedestrian amenities.
- Update the local street design standards to include universal design criteria for pedestrian curb ramps, crosswalks,

and curb extensions. Create overlay design criteria for Safe Routes to School programs, transit corridors, downtowns, and other priority pedestrian areas.

- Update design standards governing provision of street trees to increase the city's street canopy as new streets are built and as existing streets undergo major renovation. Clearly and permanently resolve issues of cost responsibility for maintenance of street trees. Ensure that standards are realistic for the local climate, specifying appropriate tree species and appropriate designs to contain tree root structures.
- Adopt a policy governing provision of bike lanes on arterials and collectors as streets are built and as existing streets undergo major renovation. Set standards for deciding which streets will have on-street lanes, taking into account spacing of facilities, speed of traffic, availability of right of way, and other practical matters. This policy will be most effective if it is based on a local bicycle system plan that sets system objectives, defines facility types, and sets connectivity standards.
- Begin developing and testing stormwater management designs such as rain gardens, bio-swales, and other techniques in preparation for development of green streets standards and policies.

2. Major Modifications

- Because streets are integral to community form and character, the best way to set the stage for improvements in street design and street network connectivity is to embed street design principles in the comprehensive plan or community master plan. In states and regions with growth management or environmental requirements governing preparation of local plans, this will be a necessary step prior to the measures described below. In most places, the planning foundation should take the form of a multimodal transportation master plan or a multimodal transportation element in the comprehensive plan.
- Revise the street classification system to create a "multimodal corridor" designation. This can also be handled as an overlay requirement without changing the underlying functional classification system. Use the multimodal corridor designation to apply complete streets principles (design for all modes) in specific corridors. A network of multimodal corridors based on local transit routes and on a bicycle system plan can guide both development review and prioritization of projects in a capital improvements program. This should be an interim step toward implementation of complete streets requirements community-wide.
- Revise street design standards to add "narrow local streets" categories. Create design templates for residential and commercial streets that are narrower than currently allowed.
- Set minimum internal connectivity standards for new subdivisions based on maximum block length, block size, intersections per square mile, or a Connectivity Index.
- Create a policy or update existing requirements to prevent any street abandonment or closure that would reduce the connectivity of the street network.

3. Wholesale Changes

- The need for a planning foundation applies to measures in this section as well. All of the measures described below should be based on an adopted multimodal transportation master plan or multimodal transportation element in the comprehensive plan.
- Overhaul the street design standards with the objective of reducing the future environmental footprint of streets. Incorporate complete streets provisions and green streets principles. Adopt narrower lanes, narrower rights of way, and reduced-lane cross sections.
- Reintroduce public alleys into the local transportation system. Create standards allowing and guiding provision of alleys in subdivisions and requiring them in large commercial projects. Add alley templates to the local street design standards.
- Set minimum internal and external connectivity standards to be applied to all new subdivisions and large commercial projects and to guide local public works decision-making relative to the capital improvements program.
- Update the code to significantly increase the amount of on-street parking in commercial and mixed-use districts and on residential streets.

PRACTICE POINTERS

- Involve emergency service providers and the public works and other departments early in comprehensive planning and before code revisions are drafted. Narrower lanes and reduced-lane cross sections can be controversial, and city councils may be unwilling to override a fire chief's concerns about these issues. In many cases, coordination and cooperation between local departments have overcome such obstacles.
- In many states, at least some degree of state guidance applies to local street design standards. And in virtually any municipality, some important streets will be under state jurisdiction (e.g., state routes). For these reasons, early and continuing coordination with the state department of transportation is critical to the success of most of the measures outlined above.
- Look for opportunities for cost savings and other benefits associated with narrower street standards, including reduced stormwater volume, reduced snow removal and other maintenance costs, and other savings.

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7 ENACT STANDARDS TO FOSTER WALKABLE PLACES

INTRODUCTION

In smart growth communities, people are able to walk comfortably and safely to work, school, parks, stores, and other destinations. Current codes in many communities, however, result in places that prevent or discourage walking by imposing low-density design (see Essential Fix No. 2), including overly wide streets and landscapes designed for cars instead of people (see Essential Fix No. 6). In such places, the pedestrian realm is treated as an afterthought—the space left over between the edge of the street and the buildings and parking lots. One significant challenge to developing a walkable community is the lack of design standards or performance measures for walkability, like those that guide other kinds of transportation planning and design. Thus many communities are not in a position to guide private development and public works investments to build good pedestrian accommodation into development and redevelopment, and they do not have programs or provisions to repair older, pedestrian-hostile areas. The magnitude of this need has been highlighted in recent years both by the number of pedestrian injuries and fatalities and by the health effects that less physical activity—which is often a direct result of urban design—have had on the U.S. population.

RESPONSE TO THE PROBLEM

The two primary elements to be addressed through codes are design standards for facilities, including public works facilities built by and for the city (e.g., streets and sidewalks), and requirements for private development and redevelopment projects. Communities usually regulate facility design through design standards adopted as ordinances or as administrative rules. In addition to guiding the planning and design decisions for municipal facilities, these design requirements may

Van Meter Williams Pollack

Pearl Street in Boulder, Colorado shows the street view of how wide sidewalks can contribute to a pleasant walkable experience.

be applied to private projects in part through the zoning approval process and in part through subdivision regulations. In some communities, form-based codes are used not only to guide the design of streets and sidewalks, but also to create a connection between all elements of the built environment. Communities may also use level of service[7] standards to ensure that development and redevelopment projects meet minimum criteria for walkability. Finally, communities may adopt Safe Routes to School program planning and design criteria and may designate pedestrian districts or zones in special areas (e.g., in downtowns, around schools, near colleges and universities).

Code Studio

The fountain and plaza located at the entrance of a bookstore act as a central gathering and meeting space in Bethasda Row.

EXPECTED BENEFITS

- Safer communities with fewer pedestrian injuries and deaths from vehicle collisions.
- Healthier people because of more opportunities to walk or bike.
- More economically viable places, stabilized property values, and reduced retail leakage (where potential patrons go elsewhere, perhaps due to a lack of safe walking conditions).
- Increased transit ridership because of better pedestrian access to transit.
- Reduced parking demand in commercial areas due to "park once" strategy.
- Reduced driving as short trips are made by walking rather than driving.
- Reduced per capita emissions of criteria air pollutants[8] and greenhouse gases resulting from reduced driving.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Develop or revise street and street crossing design standards to improve pedestrian safety, convenience, and comfort, both as a part of routine public works projects and as a part of ongoing development and redevelopment.
- Adopt standards to incorporate trees and other shade structures into the pedestrian realm, especially in mixed-use districts, addressing maintenance and irrigation as well as landowner responsibilities.
- Prepare and implement a Safe Routes to School program, taking advantage of federal funding and a national database of successful examples.

2. Major Modifications

- Designate one or more pedestrian districts (keep the initial number small) where the community will focus its efforts to make walking safer and more pleasant. Develop

7 Level of service is a measure of effectiveness by which traffic engineers determine the quality of service of elements of transportation.

8 Criteria pollutants are monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide and are regulated by EPA under the Clean Air Act.

a zoning overlay district to make targeted changes to the underlying zoning categories to reallocate street cross sections, regulate building setbacks, and so forth. Prioritize capital improvement funding to pedestrian facility needs in the zoning overlay district. Build upon success by designating additional pedestrian districts once the program has solid achievements to show in the initial district(s).

- Establish pedestrian level of service and connectivity requirements for all development and redevelopment projects of more than two acres. Include minimum pedestrian connectivity within developments and with adjacent developments.
- Adopt pedestrian environment standards for mixed-use districts to improve pedestrian safety, comfort, and convenience, including requirements for on-street parking, build-to lines, minimum façade transparency, building entrance spacing, canopies, and similar pedestrian-friendly elements.

3. Wholesale Changes

- Prepare and adopt a pedestrian circulation element in the comprehensive plan or in a separate transportation master plan. Develop a prioritized multi-year pedestrian capital improvements plan to implement the circulation element.
- Require major developments to include pedestrian circulation plans as part of application or site plan submittals. Set and apply minimum connectivity standards and level of service criteria.
- Revise subdivision and zoning development standards to require sidewalks on both sides of streets in all developments.
- Require walkways in parking lots larger than 1 acre or 200 feet wide, linking perimeter sidewalks to primary building entrances.

PRACTICE POINTERS

- Communities often adopt plans calling for the entire community to be "pedestrian friendly." This often turns out to be more a slogan than a policy. Virtually any community in the United States today has vast areas of landscape with poor pedestrian accommodation, and fixing these areas will take many years of investment and careful regulation. Communities should implement regulations that prevent new development of areas with inadequate pedestrian accommodation and adopt standards that prevent construction of any new streets with inadequate provisions for pedestrians. Public investment to retrofit and improve sidewalks, crosswalks, grade separations, and other facilities should go initially to school zones and routes, downtowns and other mixed-use districts, transit corridors, and other areas where a significant pedestrian presence is expected or desired.
- Involve a wide range of stakeholders and city departments (e.g., fire, police, public works) throughout any pedestrian circulation planning process.
- One of the most important characteristics of public streets affecting pedestrian environments is the speed of vehicular traffic. Speeds above 30 mph make sidewalks less pleasant and street crossings more dangerous and difficult.
- The most critical link in any pedestrian network is the availability of safe, appropriately spaced street crossings, especially crossings of arterial streets. Communities need good policies for location, frequency, and design of street crossings, and they must invest in safe, well-designed crossings if they want to develop functional, active pedestrian districts.
- On-street parking is an important pedestrian feature that protects walkers by separating sidewalks from moving traffic. On-street parking also makes it easier for people to walk to their destinations.
- Cities must stay current with universal design requirements that ensure sidewalks, trails, crosswalks, parking lots, building entrances, and other features of the built environment are fully accessible to people with physical disabilities and other physical challenges. The national Americans with Disabilities Act outlines specific regulatory requirements, which are expanded and updated frequently.

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8 DESIGNATE AND SUPPORT PREFERRED GROWTH AREAS AND DEVELOPMENT SITES

INTRODUCTION

For many decades, most municipalities have handled land development and growth reactively. Zoning changes have been initiated primarily by landowners and developers. Developers have often selected development locations that did not follow city comprehensive plans. Subdivision and property assembly have been undertaken by landowners and developers with specific development projects in mind. There is often a financial incentive for developers to develop peripheral sites rather than redeveloping infill sites. However, communities can better control the development they get by focusing their resources to catalyze redevelopment in desired areas.

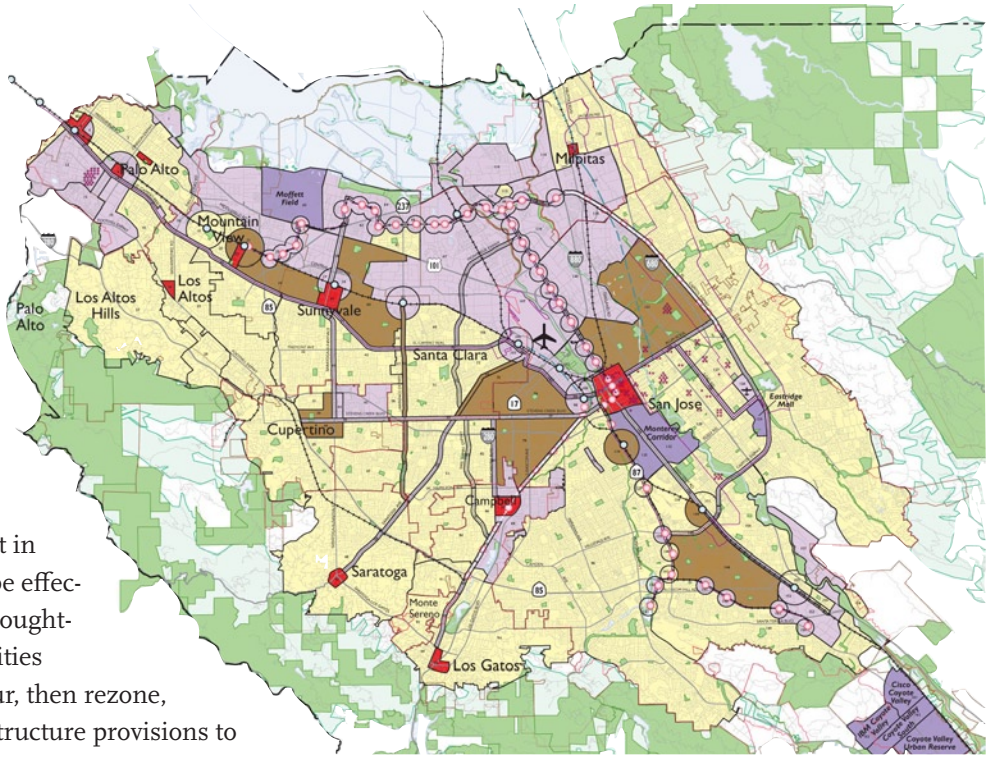
Planning land uses and development intensities in preferred growth areas and development sites generates several benefits. It encourages and facilitates redevelopment and infill, supports transit, and guides new development to appropriate areas with ready access to existing infrastructure. Local governments need to play a more active role in selecting areas where new growth makes the most sense. They need to reinforce those choices by revising their development codes and capital improvement plans to make these areas more attractive to the development community than other, less appropriate areas. This more focused approach to development can benefit both individual landowners and the entire community.

Code Studio

A palm tree-lined pedestrian plaza leads to the entrance of the largest apartment buildings at the center of Mizner Park in Florida. Higher densities in this existing development enable greenfields to be preserved.

RESPONSE TO THE PROBLEM

Municipalities need to be proactive about determining where and to what extent they will grow. This planning can provide government officials with the justification to say "no" to development proposals that are not in the community's best interests and are inconsistent with the community plan. Even in communities that cannot keep up with infrastructure needs, many local governments believe there is benefit in encouraging more development. But to be effective on behalf of current residents and thoughtful about the needs of future residents, cities need to designate where growth will occur, then rezone, change codes, and alter utility and infrastructure provisions to accommodate that growth.



Van Meter Williams Pollack

This rendering of Santa Clara, California illustrates how the city has designated preferred growth areas to keep distinctive places intact.

To focus development where it makes the most sense, a community needs a detailed plan. This plan should include comprehensive subdivision regulations and street mapping, zoning, and design guidelines, as well as an infrastructure plan and a financing or implementation plan. Developing the plan should include a comprehensive stakeholder and public engagement process. The designation of growth areas should be supported by studies and data, such as a fiscal impact analysis or a cost of infrastructure study.

EXPECTED BENEFITS

- Greater predictability for infill proposals that meet the new development standards, and certainty of location and development potential for landowners, developers, and citizens.
- More efficient development review processes. Complete policies on land use and development regulations will help streamline the review process and garner stronger support from the planning commission and/or city council.
- Cost-effective provision of infrastructure. Focusing on and prioritizing infill development will use existing infrastructure efficiently.
- Preservation of open space and natural resources. Focusing on infill development reduces pressure to expand on a community's periphery or to develop in areas with sensitive habitat or open space.

STEPS TO IMPLEMENTATION

(Note: Steps may be applied differently in infill versus greenfield locations.)

1. Modest Adjustments

- Identify and map preferred growth areas in a comprehensive plan. The plan should include goals and objectives for the various areas.
- Establish utility and transportation capacity plans.
- Change the minimum lot size, requiring smaller parcels to be aggregated or developed in conjunction with larger parcels in a coordinated manner.
- Designate agriculture interim/holding zones in lieu of low-density zoning in areas where the local government would rather not see imminent development.

- Create district or area plans to guide development.
- Vary fees for development based on location, as infill sites usually have lower infrastructure costs than peripheral or greenfield development.

2. Major Modifications

- Enact an adequate public facility ordinance (APFO). An APFO helps ensure that infrastructure for schools, road, sewers, and fire protection exists to accommodate new development.
- Establish a policy that sets criteria for annexation, including the provision of utilities, infrastructure financing, and minimum development thresholds. The policy should also include requirements for developing an annexation plan for the area. (See Essential Fix No. 10 for more on annexation issues.)
- Establish urban service areas or boundaries as part of the overall master facilities plan to help phase development in coordination with infrastructure.

3. Wholesale Changes

- Establish urban service areas or growth boundaries, and support them by zoning areas outside the boundaries for agriculture and other very low-density uses.
- As part of detailed area plans, rezone designated growth areas (e.g., around transit stops or regional activity centers) to allow denser development.

PRACTICE POINTERS

- Coordinate local government capital investment plans to support development in designated growth areas and to discourage it in other areas.
- Adopt a comprehensive plan land use map that depicts preferred development areas and clearly describes the mix of uses, community design principles, and key features desired for each area.
- Coordinate with other local governments in the region to adopt supportive plans and designated growth areas. It is extremely important to coordinate what will happen in the areas between cities so that these community separators can be maintained over time.
- It is also critical to strategically manage the phasing of growth areas. Each town or city needs to find the appropriate strategy for holding growth areas in check until they are prepared for the types of development that the community envisions.
- Communities need to find ways to prioritize development so that key projects can be implemented earlier as catalysts. Often, lower intensity or less complex developments will be attempted first, which sometimes robs critical or desired projects of their market opportunity and thus pushes them off for many years. This is particularly true of retail, which requires residential support and typically will be drawn to automobile-oriented sites before the infill sites the community may desire.

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9 USE GREEN INFRASTRUCTURE TO MANAGE STORMWATER

INTRODUCTION

Many communities across the United States face the challenge of balancing water quality protection with accommodating new growth and development. Conventional development practices cover large areas with impervious surfaces such as roads, driveways, and buildings. Once such development occurs, rainwater cannot infiltrate into the ground. Instead, it runs off the land at much higher levels than would naturally occur. The collective force of this runoff scours streams, erodes stream banks, and carries large quantities of sediment and other pollutants into waterbodies each time it rains. Most municipal stormwater regulations require stormwater management only at the site scale, using pipes, curbs, gutters, and basins. This approach has functioned well to mitigate local flooding but has resulted in degraded waterways and poor water quality at the watershed scale. A conventional approach to managing stormwater at the site scale fails to address the impacts of land use on water quality, particularly:

- Loss of natural land and disruption of water systems;
- Increased impervious surface area; and
- Increased stormwater runoff volumes.

Many local ordinances besides stormwater regulations pose barriers to better stormwater management and watershed protection. Communities must also look beyond the site scale and consider the impacts of where and how development occurs across neighborhoods and watersheds.

US Environmental Protection Agency

This picture illustrates site level green infrastructure practices such as landscaped swales to capture runoff.

RESPONSE TO THE PROBLEM

Communities are recognizing that the water quality impacts of development need to be managed at a variety of scales, including the municipal, neighborhood, and site levels. Green infrastructure uses natural and built systems at all three scales to protect water quality.

At the regional or watershed scale, green infrastructure is the interconnected network of preserved or restored natural lands and waters that provide essential environmental functions. At the community or neighborhood scale, green infrastructure incorporates planning and design approaches such as compact, mixed-use development; parking reductions; and street trees and other vegetation that reduce impervious surfaces and make communities more attractive. At the site scale, green infrastructure mimics natural systems by holding stormwater in rain gardens or swales to allow it to absorb into the ground (infiltration), using trees and other vegetation to convert it to water vapor (evapotranspiration), and using rain barrels or cisterns to capture stormwater for reuse.

Changing codes to support green infrastructure at all three scales protects water quality while creating many other environmental, community, and economic benefits. Local governments can incorporate green infrastructure by adopting plans, removing barriers, enacting regulations, and creating incentives for green infrastructure on both public lands and private property. Certain local policies, such as landscaping and parking requirements or street design criteria, can complement strong stormwater standards and make it easier for developers to simultaneously meet multiple requirements.

Communities can incorporate green infrastructure provisions into codes, policies, and standard practices through a few essential steps. First, the stormwater management plan review would take place early in the development review process to ensure that green infrastructure practices are thoughtfully incorporated into plans. Next, zoning codes and building codes need to result in the same goals and objectives for green infrastructure implementation. For instance, policies such as harvesting rainwater for irrigation can be an effective green infrastructure strategy when permissible with building codes. To make sure that green infrastructure policies are meeting water quality and other goals, communities will need to monitor and track implementation and maintenance.

EXPECTED BENEFITS

- Reduced stormwater volume and velocity and fewer stormwater overflow events.
- Less polluted stormwater runoff.
- Lower cost for stormwater management facilities.
- Urban heat island mitigation and reduced energy demand.
- Potential recreational and aesthetic amenities.
- Traffic calming.
- More distinctive communities.
- Increased land values.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Add stormwater management requirements and water quality elements to comprehensive plans to recognize and allow green infrastructure stormwater management alternatives in zoning and subdivision regulations.
- Complete the EPA Water Quality Scorecard. The tool gives local governments an idea of the range of green infrastructure policies and which might be right for a specific community.
- Offer zoning upgrades, expedited permitting, reduced stormwater requirements, and other incentives for development proposals that include green infrastructure practices.

US Environmental Protection Agency

This mall, Pompano Fashion Square in Pompano Beach, Florida, is a good example of a parking lot that could be repurposed for green infrastructure.

- Encourage site-planning meetings early in the approval process to review the green infrastructure components of development proposals along with other site planning topics.
- Develop incentives for homeowners to install rain barrels, rain gardens, green roofs, and other green infrastructure.

2. Major Modifications

- Develop a performance standard that requires a system of stormwater management where stormwater infiltrates in ground, is either reused on site and/or evapotranspires, and avoids single-use facilities. Require developers to meet stormwater requirements using green infrastructure practices where appropriate.
- Update the community's stormwater design manual with locally appropriate examples and guidelines for designing, installing, and maintaining green infrastructure.
- Review and change, where necessary, building and zoning codes or other local regulations to ensure that green infrastructure is legal (e.g., remove restrictions on downspout disconnection and stormwater reuse).
- Take into account rainwater harvesting and reuse when setting the stormwater management requirements for a development.
- Develop or revise stormwater utility bills to include a fee based on impervious services to address combined sewer overflows and offer a fee discount based on the use of green infrastructure techniques.
- Conduct inspections of sites and develop mechanisms to enforce stormwater management plans and maintenance agreements.

3. Wholesale Changes

- Give fiscal credit to developers toward stormwater management requirements for preservation of trees and open space, which help to decrease impervious surfaces and allow for stormwater infiltration.

- Amend stormwater management regulations and development codes to allow off-site stormwater management, especially for infill and redevelopment areas.
- Require green infrastructure bonds or other revenue generation in zoning or subdivision ordinances to ensure proper operation and maintenance of green infrastructure stormwater management facilities.

PRACTICE POINTERS

- Engage local governments in regional stormwater management strategies and coordinate future land use and development decisions for large-scale water quality benefits.
- Ensure that all local government departments/agencies coordinate with one another so that green infrastructure meets multiple community objectives (e.g., allow rain gardens to meet landscaping requirements).
- Enact riparian buffer regulations to protect water resources from nonpoint source pollution, stabilize banks, and provide aquatic and wildlife habitat.
- Consider separate stormwater management requirements for densely developed activity centers and infill sites as opposed to greenfield development. Recognize that impervious cover limits, open space requirements, and on-site detention requirements may be appropriate for large greenfield developments but not for more urban sites. Provide flexibility to allow off-site and regional stormwater management facilities, and give credit for alternative approaches like pervious pavement and green roofs.
- Work with key staff from local agencies such as transportation, planning, and public works to integrate green infrastructure into all codes and ordinances.

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10 ADOPT SMART ANNEXATION POLICIES

INTRODUCTION

Communities often have the most influence over development on their edges when land is annexed into a municipality. It is then that the greatest opportunity exists to determine how this land will help the community advance its overall planning goals and to ensure that the public costs of providing infrastructure and services for the annexed area are balanced with potential tax and other revenues from the annexed lands (including any exactions or other requirements).

In most states, municipalities face enormous pressure to annex lands. One of the most important forces driving annexation is communities' desire to increase their tax base, thereby increasing revenues into municipal coffers. Further, in growth areas in many states, municipalities fear that if they do not annex aggressively, their neighbors may, hemming them in and limiting their ability to grow. Finally, in many growth areas, municipalities may believe the only way to ensure that growth in the surrounding region occurs responsibly and according to a plan is to annex areas to gain control over planning, development, and design decision-making before development occurs.

Ad hoc annexation is a major cause and enabler of exurban development and sprawl. Ironically, in many cases, the tax burden from annexed areas may exceed the increase in tax revenues, especially over the long term.

RESPONSE TO THE PROBLEM

The principal policies that successful communities use to handle annexations include:

- Revising local codes to anticipate annexations in the comprehensive planning process and to ensure that annexations are consistent with adopted comprehensive plans;
- Developing intergovernmental processes and agreements—between counties and municipalities, and between neighboring municipalities—to guide and govern planning for physical expansion and annexation; and
- Establishing criteria for the review process leading up to potential annexations, including criteria for fiscal impact analyses.

Because many of the forces driving ad hoc annexation stem from local competition for tax base, communities and regions may also need to work together to rationalize their local taxation systems, including consideration of revenue sharing among jurisdictions.

EXPECTED BENEFITS

- Well-planned, contiguous municipal expansion that benefits the community, supports community character and quality of life, and promotes compact development.
- Creation of communities that are "tax positive"—places that have a logical and fiscally sound annexation of land where services and infrastructure are adequate.
- Focus on intergovernmental collaboration instead of competition for territorial expansion leading to over-extension of municipal boundaries and the resulting scattered, leapfrog development.
- Creation of logical, well-planned communities, instead of ad hoc formation of small incorporated municipalities intended primarily to prevent tax increases associated with annexation.
- Orderly, planned community expansion that accommodates population growth and provides the tax base required to meet the community's objectives.

Van Meter Williams Pollack

This urban growth boundary shows a stark contrast between the developed and undeveloped areas of this community.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Establish a code requirement that future annexations be consistent with the community comprehensive plan (or local equivalent), along with a requirement that the comprehensive plan map and describe future potential areas of annexation. These could be developed using a sphere of influence/urban transition area approach, like that used in California's Local Agency Formation Commission, or tiered planning areas like those used by the city of Boulder and Boulder County, Colorado.
- Require future potential annexation areas mapped in the comprehensive plan to include a preliminary identification of anticipated zoning, as well as a preliminary description of how municipal services and infrastructure (e.g., water, sanitary sewer, stormwater, transportation, police, and fire) would be funded in annexed areas. This should be based on community service standards and an assessment of existing conditions and capacities in the mapped areas.
- Require the mapping of potential future annexation areas in the comprehensive plan to identify and evaluate any prime agricultural lands, important wildlife habitat, areas of special ecological value or concern, and any lands contaminated by past industrial or agricultural activities or hazardous materials spills.
- Establish a code requirement that the transportation element of the community comprehensive plan (or local equivalent) identify a future collector and arterial street network for any potential annexation areas mapped in the plan. Require extensions of the existing municipal street network to be mapped to meet minimum internal connectivity standards in any annexed areas, as well as minimum external connectivity with existing and future neighborhoods.

2. Major Modifications

- Adopt fiscal impact analysis requirements for proposed annexations, including criteria for the forecast ratio of revenues to costs. Include provisions for additional fees to rectify imbalances.

- Establish a minimum contiguity requirement for any proposed annexation area. For example, at least 25 percent of the circumference of any proposed annexation must be coterminous with the existing incorporated area, subject to exceptions for bodies of water. An adjunct provision or variation would be to specifically prohibit "flagpole" annexations.[9]
- Develop and adopt joint infrastructure standards (e.g., water, sanitary sewer, stormwater, streets) for a municipality and its surrounding county, or by multiple municipalities and/or counties, to be applied to proposed development in areas that may eventually be annexed into a municipality. This ensures that any development in future annexation areas that occurs prior to annexation is compatible with the annexing community. It also ensures that facilities are designed consistently with standards of the municipalities. This coordination discourages landowners or developers from "shopping" one government against another to obtain the combination of services and fees—which could turn out to be a bad deal for the municipality.

3. Wholesale Changes

(Note: some measures below are in support of code changes, but are not in themselves addressed through the zoning or land development code.)

- Develop an intergovernmental agreement between one or more municipalities and one or more counties providing for development and adoption of a multi-jurisdiction comprehensive plan. Include provisions for identifying areas of potential annexation and provisions for zoning, infrastructure, lands of special concern, and street extensions, similar to the four measures described under Modest Adjustments.
- Develop an intergovernmental agreement between one or more municipalities and one or more counties to guide the annexation process in specific areas, which would be mapped in the agreement. Include provisions addressing infrastructure standards, funding for extension of infrastructure and services, and the approval processes of the affected jurisdictions.
- Develop a regional compact or intergovernmental agreement for revenue sharing to reduce or eliminate the pressure to annex land for municipal budget growth.

US Environmental Protection Agency

The Urban Development Boundary in Miami-Dade County, Florida, illustrates the division between land intended for development and area meant to be preserved.

PRACTICE POINTERS

- Annexation law and policy are among the most controversial aspects of growth management. Many states are changing the laws governing the authority of municipalities to annex land, establishing or revising criteria for annexations, requiring additional review and approval by adjacent counties and municipalities, and providing for oversight by third parties or agencies. The first step for any municipality is to make sure that its ordinances are consistent with state law.
- Issues related to estimating costs of extending infrastructure and municipal services into potential annexation areas are difficult to resolve if there are no agreed-upon standards for the timing, placement, and design of facili-

9 Flagpole annexations are connected to a municipality through a narrow strip of land.

ties and services. An important step in addressing annexation policy issues is to work—ideally in cooperation with other area governments—on design and service standards to estimate the cost of providing facilities and services.

- One of the potential benefits of good annexation policy, especially with multiple jurisdictions involved, is avoiding the leapfrogging of suburban subdivisions and commercial projects outside municipal areas.

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11 ENCOURAGE APPROPRIATE DEVELOPMENT DENSITIES ON THE EDGE

INTRODUCTION

On the periphery of urban areas, suburbs, and small towns, communities' development patterns are often not dense enough to support mixed land uses or transit or to create other efficiencies associated with denser development patterns, such as cost-efficient infrastructure. At the same time, these areas are often too dense for rural areas to maintain a truly rural character. Rural development patterns typically:

- Are supported by limited infrastructure (relying, for instance, on gravel roads and septic systems);
- Cost less to support because they use fewer government services; and
- Preserve large tracts of open space and agricultural lands.

This issue is most relevant to exurban development—areas outside the jurisdictional boundaries of cities and towns. The density is approximately 2 to 4 housing units per gross acre at the more suburban end of the spectrum, and one unit per 20 to 40 acres at the rural end. Many suburban, small town, and county zoning codes and subdivision ordinances allow only these densities. Densities can vary based on regional differences. For instance, Western states will have a different threshold than those in the Southeast.

This low-density development pattern has been one of the fastest growing sectors of the housing market, fueled by a variety of factors, including people moving to rural communities for the quality of life, an expanding second-home market for less expensive vacation homes in small towns, and rural communities' desire to grow. Developers have also found such rural areas to be the "path of least resistance." They are generally able to quickly obtain approvals through a county or rural town's less complicated entitlement procedure.

Land use laws, particularly in the Western states, give extensive rights to large landowners, ranchers, and farmers to develop their properties in the future, typically at lower densities. In these places, low-density residential zoning is the de facto zoning that has been overlaid onto many large tracts of land. This means that many areas that are perceived to be rural are, in fact, zoned for residential development that does not fit a rural context.

The desire to remain rural or maintain a small-town character is a common theme in these communities. Lower densities are often encouraged in the belief that they will help preserve an area's rural character. These densities, however, most frequently translate into low-density, cookie-cutter subdivisions, with streets and homes that are more typical of suburban, rather than rural, communities. The most difficult densities are those in the ½-acre to 5-acre range. The difficulties with these densities include:

- Expensive infrastructure to both provide and maintain to serve a minimal number of units;
- Reliance on septic systems, which have a limited capacity over time;
- A land use pattern that is difficult or impossible to intensify later, as it typically includes individual property owners, making land hard to assemble; and
- Farmland that becomes fragmented by these large-lot homes, which means little possibility of carrying on true agriculture or maintaining farm animals in these areas.

These densities are neither rural nor town-like in their character. Once developed, they are difficult to change and become more difficult to maintain over time.

US Environmental Protection Agency

This aerial from suburban Dallas shows how the "Devil's Density" is built out on the edge of the town at residential density that is not efficient with more compact development patterns.

This type of growth also becomes a jurisdictional, city-versus-county issue. Much of this development pattern is occurring within county jurisdictions at or near city limits because large agricultural properties are being developed under county development procedures. The counties often have minimal regulations and limited resources to plan for, review, or process these types of developments. This has made it difficult to control the implementation of policies and restrictions as well as standards for these developments. Developers often are better equipped than county planning and engineering staff to deal with the various complex issues that arise from these developments.

RESPONSE TO THE PROBLEM

Density that cannot support necessary services is not sustainable on any level—fiscally, environmentally, socially, and for public health. In most places, zoning at one unit per 2 gross acres typically cannot support necessary services. When zoning at this density, communities usually are focused more on the perceived market demand and/or potential tax revenue than on what it will take in infrastructure and other resources to support such a pattern. When communities look at the potential impacts and decipher where they can make improvements through increased densities as well as other zoning changes, they can make their neighborhoods fiscally sound and environmentally sustainable.

Finding a solution takes a balance of strategies, combining those that eliminate the types of densities so persistent where urban and rural communities meet with those that direct unsustainable development patterns away from these areas.

When communities grow, their comprehensive plans should cover only areas that form a natural edge to the community and that will not be expanded beyond or leapfrogged in the future. An example may be an area bordering a creek or other natural open space, which provides a natural barrier to expansion and clearly defines an edge to the community. Another strategy is to continue the town's street pattern to use the infrastructure to its fullest capacity and then end in an agricultural zone at the community's edge. This will better integrate large lots into the community by using them to transition to agricultural uses at the town's periphery.

These remedies only address the properties at a community's edge. The most problematic developments are those that employ unsustainable densities outside these areas as ranches, orchards, and farms are developed. These sites are typically in counties' jurisdictions. Counties and towns, therefore, need to coordinate their planning efforts to minimize the ad hoc development of rural areas and integrate their comprehensive plans to include expansion areas and areas that will be maintained for agriculture or open space. Towns and counties will

US Environmental Protection Agency

This New Jersey farmland is punctuated by a low density residential development creating a conflict between providing services to these homes and preserving agricultural uses.

need to tackle this issue together in a comprehensive manner to address planning, engineering, property ownership, and development issues.

EXPECTED BENEFITS

- Lower infrastructure costs for local and state governments and service providers.
- Preservation of large, contiguous blocks of open space and agricultural lands. This is most critical for protecting habitat corridors and maintaining viable agricultural activities and related businesses.
- Support for downtowns and traditional neighborhood developments, with greater connectivity with the immediate town or city.
- Consistent and connected patterns of development instead of leapfrog growth, which disregards planned boundaries.
- Minimizing the areas that are hamstrung by limited redevelopment potential due to ownership patterns and the lack of opportunities for land assembly.

STEPS TO IMPLEMENTATION

(Note: Several implementation steps from Essential Fix No. 8 that support preferred growth areas also apply to this fix, including agricultural interim holding zones, area-specific impact fees, adequate public facilities ordinances, annexation policies, and urban services areas and boundaries.)

1. Modest Adjustments

- Adopt comprehensive plans that encourage sustainable development patterns in peripheral and exurban areas by redesignating density allocations.
- Amend zoning ordinances to repeal zone districts that allow unsustainable densities at the community's edge.
- Develop design regulations that require connectivity and integration with adjacent neighborhoods and create transitions to adjacent agricultural or undeveloped areas.

2. Major Modifications

- Establish benchmarks for intended densities in comprehensive plans in rural areas (e.g., one unit per 80 acres in some Western states).
- Require minimum densities in areas targeted for growth.
- Require cluster/conservation subdivisions at the community's edge to transition to rural areas. These subdivisions are for edge conditions only, with denser zoning on one side and rural areas on the other.
- Require comprehensive fiscal impact and mitigation analysis for proposed rural developments. Require mitigation measures so that rural developments pay their own way.
- Use the SmartCode to categorize and implement the zoning regulations by classifying an appropriate transect for these urban-rural interface areas and adapting the regulations for the community.

3. Wholesale Changes

- Preserve agricultural viability by zoning for large agriculture-only districts.
- Require mandatory annexation as a condition of development approvals in town impact areas (consider a "no objection" clause that is approved by the property owner when annexation is feasible and desired by the town. This clause will make the annexation process predictable and fair).
- Encourage joint town and county policies that set criteria such as location or size controls to coordinate the development of land instead of insular land use resulting from PUDs. (See Essential Fix No. 3.)

PRACTICE POINTERS

- Depending on the state, land patterns, and types of agriculture, the appropriate acreage for agriculturally zoned parcels will vary.
- Consider how rules related to lot splits or family subdivision rights chart the course for inappropriate densities. Family subdivisions are often used to get around minimum lot size regulations.
- In the past, communities have zoned for economic development and property ownership interests, relying on unsustainable development patterns. Often, smaller towns see fees associated with low-density development, along with construction jobs and retail sales, as economic development. Unfortunately, the cost of maintaining the public infrastructure frequently exceeds the value brought with the short-term economic development.
- Do not allow cluster/conservation subdivisions in areas where true rural development patterns are preferred. Clustered subdivisions disrupt agricultural operations.
- In certain circumstances, land trusts have purchased conservation easements from farmers and ranchers that prohibit development. Selling the easement gives landowners some financial benefit without having to develop their land. This strategy allows landowners to maintain their farms.
- Transfer of Development Rights (TDR) programs may be considered; however, these programs are complex and will be feasible only in specific situations.

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Summary of Smart Growth Fixes

"Essential Smart Growth Fixes for Urban and Suburban Codes (EPA 2009)"

https://www.epa.gov/sites/default/files/2014-01/documents/2009_essential_fixes_0.pdf

For each of the 11 zoning objective sections in Urban Suburban mixed use document and listed below, see the subsection called, "Steps to Implementation" for specific zoning recommendations.

1. Allow or Require Mixed-Use Zones
2. Use Urban Dimensions in Urban Places
3. Rein in and Reform the Use of Planned Unit Developments
4. Fix Parking Requirements
5. Increase Density and Intensity in Centers
6. Modernize Street Standards
7. Enact Standards to Foster Walkable Places
8. Designate and Support Preferred Growth Areas and Development Sites
9. Use Green Infrastructure to Manage Stormwater
10. Adopt Smart Annexation Policies
11. Encourage Appropriate Development Densities on The Edge

"Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes (EPA, 2012)"

https://www.epa.gov/sites/default/files/documents/essential_smart_growth_fixes_rural_0.pdf

For each of the 10 zoning objectives in this document and listed below, see the subsection called "Steps to Implementation" for specific zoning recommendations.

1. Determine Areas for Growth and for Preservation
2. Incorporate Fiscal Impact Analysis in Development Reviews
3. Reform Rural Planned Unit Developments
4. Use Wastewater Infrastructure Practices That Meet Development Goals
5. Right-Size Rural Roads
6. Encourage Appropriate Densities on the Periphery
7. Use Cluster Development to Transition from Town to Countryside
8. Create Annexation Policies and Development Standards That Preserve Rural Character
9. Protect Agricultural and Sensitive Natural Areas
10. Plan and Encourage Rural Commercial Development

Source: https://www.epa.gov/sites/default/files/2014-01/documents/2009_essential_fixes_0.pdf

"Essential Smart Growth Fixes for Urban and Suburban Zoning Codes"

Zoning Recommendations Check List

(All fixes should be evaluated by relevantl STEEP priorities)

FIX 1: ALLOW OR REQUIRE MIXED-USE ZONES

Steps to Implementation

1. Modest Adjustments

- ☐ Define mixed-use areas/activity centers in land use plans (on a neighborhood, community, and/or regional scale), and designate preferred locations for them.
- ☐ Permit residences in the upper floors of buildings in appropriate existing commercially zoned districts.

2. Major Modification

- ☐ Remove obstacles to mixed-use development by creating zoning districts that allow mixed-use development by right (i.e., without the need for a rezoning or special discretionary approval process).
- ☐ Develop a variety of mixed-use districts, including vertical mixed uses and horizontal mixed uses, as needed. The context of uses (e.g., main street, neighborhood setting) is important for determining the type of mixed-use district.
- ☐ Designate mixed-use districts on the official zoning map.

3. Wholesale Changes

- ☐ Synchronize zoning codes and area plans to coordinate the location and development of mixed-use districts.

FIX 2: USE URBAN DIMENSIONS IN URBAN PLACES

Steps to Implementation

1. Modest Adjustments

- ☐ Tailor dimensional standards in the development code to promote more compact development. Consider changing minimum standards to maximums.
    - o For residential development, relevant changes could include lot width and area changes, smaller yards, increased lot or building coverage for smaller lots, increased height, and increased density.
    - o For commercial or mixed use development, relevant changes could include increased height, smaller yards and open space, increased lot or building coverage, and increased floor area ratios (FAR).
- ☐ Replace FAR with form standards such as height and maximum setbacks. Consider limiting building footprints in neighborhood commercial areas.
- ☐ Modify codes for commercial districts to allow residential development, especially over first-floor retail.
- ☐ Eliminate landscape buffers in the commercial area; there is no need to buffer like uses, such as two office buildings or a restaurant and a store, from each other.

2. Major Modifications

- ☐ Create incentives to provide multiple housing types in existing districts through dimensional standards (e.g., enable small lots and limited buffer yards between homes).
- ☐ Establish or reduce block lengths or perimeters to produce better connections and increase walkability.

- ☐ Adopt context-based or neighborhood-based dimensional standards that replicate existing, appealing, compact neighborhood patterns (e.g., narrow street width, sidewalks wide enough for safe and comfortable walking).

2. Major Modifications for USE URBAN DIMENSIONS IN URBAN PLACES Continued

- ☐ Revise the codes for existing districts to encourage neighborhood redevelopment by applying new dimensional standards such as smaller lot requirements.
- ☐ Create districts for new compact building and development types that are not currently found in your community or neighborhood. (See the discussion of mixed use in Essential Fix No. 1.)

3. Wholesale Changes

- ☐ Coordinate new form-based dimensional standards, such as the siting of buildings, with zoning map changes to reflect the nature of form-based development versus use- specific zones.
- ☐ Plan a subarea of the community, then develop or calibrate and adopt a form-based code to create an option for additional compact, walkable neighborhoods.

FIX 3: REIGN IN & REFORM THE USE OF PLANNED UNIT DEVELOPMENTS

Steps to Implementation

1. Modest Adjustments

- ☐ Reform the PUD process to ensure that the parcel is designed appropriately given topography, adjacent uses, and additional impacts in the PUD-designated areas. Reduce the use of PUDs on small sites (under 2 acres).
- ☐ Remove or substantially reduce the need to use PUDs by fixing dimensional standards, particularly on small parcels. (See Essential Fix No. 2.)
- ☐ Create standards for PUD (e.g., apply Traditional Neighborhood Design policies, standards, and design guidelines as base PUD regulations prior to receiving development proposals).
- ☐ If PUDs are allowed, rein them in by establishing a minimum size for PUD projects, identifying specific allowable locations, and prohibiting waivers or other weakening of important environmental and design standards.

2. Major Modifications

- ☐ Prohibit PUDs as an alternative to following comprehensive plans and zoning codes. This may require communities to run public input processes to provide the detailed goals, objectives, and design elements for individual development proposals for larger sites. The community may also decide to rewrite its zoning regulations.

3. Wholesale Changes

- ☐ Create distinctive area and sector plans that give clear guidance to staff and the development community as to the vision and intended built-out of development. Complement these plans with accompanying zoning.
- ☐ Prior to accepting a development proposal for an area, communities should undergo a public master planning process to set goals and objectives; map land use and zoning; and set standards, regulations, and development quality through guidelines for the entire planning area.
- ☐ Implement an overlay district that allows the development of a site or area if specific standards are adopted. An example could be an overlay of the SmartCode, or another set of development regulations onto an area designated in the comprehensive plan for future development.

FIX 4: FIX PARKING REQUIREMENTS

1. Modest Adjustments

- Create a parking overlay district in the parking code for a downtown or other mixed-use area. Reduce minimum off-street parking supply requirements in the overlay district based on recalculated demand resulting from alternative transportation options, the mix of land uses, and a "park once" strategy that encourages parking in one place and walking to multiple destinations. Calculate a shared parking allowance based on the specific land uses in the overlay district.
- Develop residential parking permit provisions to help protect neighborhoods affected by overflow parking resulting from increased parking enforcement. Design the system to be applied in neighborhoods (not automatically citywide) based on criteria, such as the actual amount of on-street parking demand. Carefully manage and enforce the residential parking permit system to avoid abuse, such as sale of permits. Consider returning a portion of receipts from parking permit fees to the neighborhood in the form of street repairs and improvements. Consider selling "commuter permits" for residential streets in parking permit districts near mixed-use centers, with all or some of the revenue returned to the neighborhood in the form of capital repairs and improvements.
- Work with the public works department to increase the amount of on-street parking in a downtown or other mixed-use center. Convert parallel to diagonal parking where feasible. Evaluate parking stall specifications (length and width) and reduce them to increase parking supply.
- Establish (in the code) authorization for parking advisory committees for specific areas where parking issues are controversial. Provide for the appointment of a cross section of stakeholders, including businesses and residents. Charter the committee to advise on parking studies and on potential changes to parking ordinances.

2. Major Modifications

- Undertake a comprehensive revision of the parking ordinance. Some specific revisions might include:
- Revise the tables of parking supply minimums, reducing them wherever possible to reflect context, transportation options, and land use mix.
- Develop a system of shared parking credits, either as a set percentage in connection with form-based codes or based on the land use mix in connection with zoning.
- Create parking overlay districts for downtowns and mixed-use centers and write provisions for future additional overlay districts.
- Unbundle parking from residential development in districts with higher densities and a mix of uses.
- Allow off-site parking in dense retail districts and set limits for its distance from development sites.
- Develop provisions to govern joint parking (i.e., parking allowed through contracts or leases with other businesses or landowners) to ensure that parking supply commitments made in connection with development approval are honored and maintained over time.
- Allow some credit for on-street parking supply in retail districts. Allow for substitution of a form-based code in certain zone districts to simplify and eliminate the need for more detailed parking regulations.
- Overhaul the parking enforcement system. Improve enforcement of parking time limits by acquiring hand-held computers for issuing tickets (replacing a system of chalking tires). Revise the parking overtime ordinance to provide escalating fines for scofflaws (repeat offenders) and set fines at levels that deter abuse. Increase enforcement levels so that probability of being ticketed for overtime parking approaches certainty. Evaluate parking supply in and around parking overlay districts and identify parking supply to be available for commuter parking use. Develop a Residential Parking Permit (RPP) system to help protect neighborhoods impacted by overflow parking resulting from increased parking enforcement.

3. Wholesale Changes

- Work with the local or regional transit agency to develop a commuter transit pass that is bundled with a parking permit in parking districts and paid for with proceeds from the district's revenues, including tax revenues. Use this "universal pass" to increase transit patronage while managing commuter parking demand.
- Institute paid parking for public parking supply in parking districts. Start with off-street, publicly owned parking. Pay kiosks for on-street parking can reduce streetscape impacts such as visual clutter from individual parking meters, are more efficient, and are more convenient for customers.

FIX 5: INCREASE DENSITY & INTENSITY IN CENTERS

Steps to Implementation

1. Modest Adjustments

- Set minimum (as opposed to maximum) densities in general or comprehensive plans and zoning districts. This tool helps creates neighborhoods that are close-knit and vibrant and helps achieve benchmarks for citywide housing policies and goals.
- Designate locations for higher density development centers in comprehensive plans.
- Create activity center districts with higher densities, increased heights and FAR, and reduced parking requirements. This can be done by creating specific zones, modifying existing zones, or creating a new overlay district that allows selective modification of existing zoning regulations in an already zoned area without changing all the zoning of a parcel.

2. Major Modifications

- Tailor development standards (e.g., height limits and FAR, parking requirements, and open space and landscaping regulations) to accommodate denser developments.
- Urban-style projects should not be evaluated based on low-density development standards.
- Rezone areas designated as activity centers based on comprehensive plans to increase density, as opposed to using case-by-case rezoning.

3. Wholesale Changes

- Use a redevelopment agency to purchase difficult-to obtain or critical parcels. This is particularly effective with areas such as corridors, which often have smaller parcels that require aggregation to allow higher density development.
- Establish minimum densities or intensities in community or regional mixed-use centers and transit-oriented developments.
- Use height, placement, coverage, and perviousness requirements, rather than FAR, to regulate structured parking. For example, do not count structured parking toward FAR if it is screened from view with retail, residential or office structures, or is constructed above the ground floor of a structure.
- Parking can be a costly component of development. Parking may be reduced as part of a TOD or a mixed-use, high-density district. Parking may also be “unbundled” from the residential units, which allows residents to choose not to purchase parking. (See Essential Fix No. 4.)
- Set parking maximums rather than minimums to discourage too much parking supply for a development. This will allow higher density development, as parking often limits a project’s overall density.

FIX 6. MODERNIZE STREET STANDARDS

Steps to Implementation

1. Modest Adjustments

- Revise the local street design standards to add a “road diet” cross section for appropriate streets that currently have four general purpose lanes with no on-street parking, no bike lanes, inadequate pedestrian space, or any combination of these deficiencies. Set criteria for conversion to three lanes (two general purpose lanes and a two-way left turn lane) with either bike lanes or on-street parking and improved pedestrian amenities.
- Update the local street design standards to include universal design criteria for pedestrian curb ramps, crosswalks, and curb extensions. Create overlay design criteria for Safe Routes to School programs, transit corridors, downtowns, and other priority pedestrian areas.
- Update design standards governing provision of street trees to increase the city’s street canopy as new streets are built and as existing streets undergo major renovation. Clearly and permanently resolve issues of cost responsibility for maintenance of street trees. Ensure that standards are realistic for the local climate, specifying appropriate tree species and appropriate designs to contain tree root structures.
- Adopt a policy governing provision of bike lanes on arterials and collectors as streets are built and as existing streets undergo major renovation. Set standards for deciding which streets will have on-street lanes, taking into account spacing of facilities, speed of traffic, availability of right of way, and other practical matters. This policy will be most effective if it is based on a local bicycle system plan that sets system objectives, defines facility types, and sets connectivity standards.
- Begin developing and testing stormwater management designs such as rain gardens, bio-swales, and other techniques in preparation for development of green streets standards and policies.

2. Major Modifications

- Because streets are integral to community form and character, the best way to set the stage for improvements in street design and street network connectivity is to embed street design principles in the comprehensive plan or community master plan. In states and regions with growth management or environmental requirements governing preparation of local plans, this will be a necessary step prior to the measures described below. In most places, the planning foundation should take the form of a multimodal transportation master plan or a multimodal transportation element in the comprehensive plan.
- Revise the street classification system to create a “multimodal corridor” designation. This can also be handled as an overlay requirement without changing the underlying functional classification system. Use the multimodal corridor designation to apply complete streets principles (design for all modes) in specific corridors. A network of multimodal corridors based on local transit routes and on a bicycle system plan can guide both development review and prioritization of projects in a capital improvements program. This should be an interim step toward implementation of complete streets requirements communitywide.
- Revise street design standards to add “narrow local streets” categories. Create design templates for residential and commercial streets that are narrower than currently allowed.
- Set minimum internal connectivity standards for new subdivisions based on maximum block length, block size, intersections per square mile, or a Connectivity Index.
- Create a policy or update existing requirements to prevent any street abandonment or closure that would reduce the connectivity of the street network.
- FIX 6. MODERNIZE STREET STANDARDS continued

3. Wholesale Changes

- The need for a planning foundation applies to measures in this section as well. All of the measures described below should be based on an adopted multimodal transportation master plan or multimodal transportation element in the comprehensive plan.
- Overhaul the street design standards with the objective of reducing the future environmental footprint of streets. Incorporate complete streets provisions and green streets principles. Adopt narrower lanes, narrower rights of way, and reduced-lane cross sections.
- Reintroduce public alleys into the local transportation system. Create standards allowing and guiding provision of alleys in subdivisions and requiring them in large commercial projects. Add alley templates to the local street design standards.
- Set minimum internal and external connectivity standards to be applied to all new subdivisions and large commercial projects and to guide local public works decision-making relative to the capital improvements program.
- Update the code to significantly increase the amount of on-street parking in commercial and mixed-use districts and on residential streets.

Steps to Implementation

1. Modest Adjustments

- ☐ Develop or revise street and street crossing design standards to improve pedestrian safety, convenience, and comfort, both as a part of routine public works projects and as a part of ongoing development and redevelopment.
- ☐ Adopt standards to incorporate trees and other shade structures into the pedestrian realm, especially in mixed use districts, addressing maintenance and irrigation as well as landowner responsibilities.
- ☐ Prepare and implement a Safe Routes to School program, taking advantage of federal funding and a national database of successful examples.

2. Major Modifications

- ☐ Designate one or more pedestrian districts (keep the initial number small) where the community will focus its efforts to make walking safer and more pleasant. Develop a zoning overlay district to make targeted changes to the underlying zoning categories to reallocate street cross sections, regulate building setbacks, and so forth. Prioritize capital improvement funding to pedestrian facility needs in the zoning overlay district. Build upon success by designating additional pedestrian districts once the program has solid achievements to show in the initial district(s).
- ☐ Establish pedestrian level of service and connectivity requirements for all development and redevelopment projects of more than two acres. Include minimum pedestrian connectivity within developments and with adjacent developments.
- ☐ Adopt pedestrian environment standards for mixed-use districts to improve pedestrian safety, comfort, and convenience, including requirements for on-street parking, build-to lines, minimum façade transparency, building entrance spacing, canopies, and similar pedestrian-friendly elements.

3. Wholesale Changes

- ☐ Prepare and adopt a pedestrian circulation element in the comprehensive plan or in a separate transportation master plan. Develop a prioritized multi-year pedestrian capital improvements plan to implement the circulation element.
- ☐ Require major developments to include pedestrian circulation plans as part of application or site plan submittals. Set and apply minimum connectivity standards and level of service criteria.
- ☐ Revise subdivision and zoning development standards to require sidewalks on both sides of streets in all developments.
- ☐ Require walkways in parking lots larger than 1 acre or 200 feet wide, linking perimeter sidewalks to primary building entrances.

FIX 8: DESIGNATE & SUPPORT PREFERRED GROWTH AREAS AND DEVELOPMENT SITES

Steps to Implementation

(Note: Steps may be applied differently in infill versus greenfield locations.)

1. Modest Adjustments

- Identify and map preferred growth areas in a comprehensive plan. The plan should include goals and objectives for the various areas.
- Establish utility and transportation capacity plans.
- Change the minimum lot size, requiring smaller parcels to be aggregated or developed in conjunction with larger parcels in a coordinated manner.
- Designate agriculture interim/holding zones in lieu of low-density zoning in areas where the local government would rather not see imminent development.
- Create district or area plans to guide development.
- Vary fees for development based on location, as infill sites usually have lower infrastructure costs than peripheral or greenfield development.

2. Major Modifications

- Enact an adequate public facility ordinance (APFO). An APFO helps ensure that infrastructure for schools, road, sewers, and fire protection exists to accommodate new development.
- Establish a policy that sets criteria for annexation, including the provision of utilities, infrastructure financing, and minimum development thresholds. The policy should also include requirements for developing an annexation plan for the area. (See Essential Fix No. 10 for more on annexation issues.)
- Establish urban service areas or boundaries as part of the overall master facilities plan to help phase development in coordination with infrastructure.

3. Wholesale Changes

- Establish urban service areas or growth boundaries and support them by zoning areas outside the boundaries for agriculture and other very low-density uses.
- As part of detailed area plans, rezone designated growth areas (e.g., around transit stops or regional activity centers) to allow denser development.

FIX 9: USE GREEN INFRASTRUCTURE TO MANAGE STORMWATER

Steps to Implementation

1. Modest Adjustments

- ☐ Add stormwater management requirements and water quality elements to comprehensive plans to recognize and allow green infrastructure stormwater management alternatives in zoning and subdivision regulations.
- ☐ Complete the EPA Water Quality Scorecard. The tool gives local governments an idea of the range of green infrastructure policies, and which might be right for a specific community.
- ☐ Offer zoning upgrades, expedited permitting, reduced stormwater requirements, and other incentives for development proposals that include green infrastructure practices.
- ☐ Encourage site-planning meetings early in the approval process to review the green infrastructure components of development proposals along with other site planning topics.
- ☐ Develop incentives for homeowners to install rain barrels, rain gardens, green roofs, and other green infrastructure.

2. Major Modifications

- ☐ Develop a performance standard that requires a system of stormwater management where stormwater infiltrates in ground, is either reused on site and/or evapotranspires, and avoids single-use facilities. Require developers to meet stormwater requirements using green infrastructure practices where appropriate.
- ☐ Update the community's stormwater design manual with locally appropriate examples and guidelines for designing, installing, and maintaining green infrastructure.
- ☐ Review and change, where necessary, building and zoning codes or other local regulations to ensure that green infrastructure is legal (e.g., remove restrictions on downspout disconnection and stormwater reuse).
- ☐ Take into account rainwater harvesting and reuse when setting the stormwater management requirements for a development.
- ☐ Develop or revise stormwater utility bills to include a fee based on impervious services to address combined sewer overflows and offer a fee discount based on the use of green infrastructure techniques.
- ☐ Conduct inspections of sites and develop mechanisms to enforce stormwater management plans and maintenance agreements.

3. Wholesale Changes

- ☐ Give fiscal credit to developers toward stormwater management requirements for preservation of trees and open space, which help to decrease impervious surfaces and allow for stormwater infiltration.
- ☐ Amend stormwater management regulations and development codes to allow off-site stormwater management, especially for infill and redevelopment areas.
- ☐ Require green infrastructure bonds or other revenue generation in zoning or subdivision ordinances to ensure proper operation and maintenance of green infrastructure stormwater management facilities.

FIX 10. ADOPT SMART ANNEXATION POLICIES

Steps to Implementation

1. Modest Adjustments

- Establish a code requirement that future annexations be consistent with the community comprehensive plan (or local equivalent), along with a requirement that the comprehensive plan map and describe future potential areas of annexation. These could be developed using a sphere of influence/urban transition area approach, like that used in California's Local Agency Formation Commission, or tiered planning areas like those used by the city of Boulder and Boulder County, Colorado.
- Require future potential annexation areas mapped in the comprehensive plan to include a preliminary identification of anticipated zoning, as well as a preliminary description of how municipal services and infrastructure (e.g., water, sanitary sewer, stormwater, transportation, police, and fire) would be funded in annexed areas. This should be based on community service standards and an assessment of existing conditions and capacities in the mapped areas.
- Require the mapping of potential future annexation areas in the comprehensive plan to identify and evaluate any prime agricultural lands, important wildlife habitat, areas of special ecological value or concern, and any lands contaminated by past industrial or agricultural activities or hazardous materials spills.
- Establish a code requirement that the transportation element of the community comprehensive plan (or local equivalent) identify a future collector and arterial street network for any potential annexation areas mapped in the plan. Require extensions of the existing municipal street network to be mapped to meet minimum internal connectivity standards in any annexed areas, as well as minimum external connectivity with existing and future neighborhoods.

2. Major Modifications

- Adopt fiscal impact analysis requirements for proposed annexations, including criteria for the forecast ratio of revenues to costs. Include provisions for additional fees to rectify imbalances.
- Establish a minimum contiguity requirement for any proposed annexation area. For example, at least 25 percent of the circumference of any proposed annexation must be coterminous with the existing incorporated area, subject to exceptions for bodies of water. An adjunct provision or variation would be to specifically prohibit "flagpole" annexations.
- Develop and adopt joint infrastructure standards (e.g., water, sanitary sewer, stormwater, streets) for a municipality and its surrounding county, or by multiple municipalities and/or counties, to be applied to proposed development in areas that may eventually be annexed into a municipality. This ensures that any development in future annexation areas that occurs prior to annexation is compatible with the annexing community. It also ensures that facilities are designed consistently with standards of the municipalities. This coordination discourages landowners or developers from "shopping" one government against another to obtain the combination of services and fees—which could turn out to be a bad deal for the municipality.

3. Wholesale Changes

(Note: some measures below are in support of code changes, but are not in themselves addressed through the zoning or land development code.)

- Develop an intergovernmental agreement between one or more municipalities and one or more counties providing for development and adoption of a multi-jurisdiction comprehensive plan. Include provisions for identifying areas of potential annexation and provisions for zoning, infrastructure, lands of special concern, and street extensions, like the four measures described under Modest Adjustments.
- Develop an intergovernmental agreement between one or more municipalities and one or more counties to guide the annexation process in specific areas, which would be mapped in the agreement. Include provisions addressing infrastructure standards, funding for extension of infrastructure and services, and the approval processes of the affected jurisdictions.
- Develop a regional compact or intergovernmental agreement for revenue sharing to reduce or eliminate the pressure to annex land for municipal budget growth.

Steps to Implementation

(Note: Several implementation steps from Essential Fix No. 8 that support preferred growth areas also apply to this fix, including agricultural interim holding zones, area-specific impact fees, adequate public facilities ordinances, annexation policies, and urban services areas and boundaries.)

1. Modest Adjustments

- ☐ Adopt comprehensive plans that encourage sustainable development patterns in peripheral and exurban areas by redesignating density allocations.
- ☐ Amend zoning ordinances to repeal zone districts that allow unsustainable densities at the community's edge.
- ☐ Develop design regulations that require connectivity and integration with adjacent neighborhoods and create transitions to adjacent agricultural or undeveloped areas.

2. Major Modifications

- ☐ Establish benchmarks for intended densities in comprehensive plans in rural areas (e.g., one unit per 80 acres in some Western states).
- ☐ Require minimum densities in areas targeted for growth.
- ☐ Require cluster/conservation subdivisions at the community's edge to transition to rural areas. These subdivisions are for edge conditions only, with denser zoning on one side and rural areas on the other.
- ☐ Require comprehensive fiscal impact and mitigation analysis for proposed rural developments. Require mitigation measures so that rural developments pay their own way.
- ☐ Use the SmartCode to categorize and implement the zoning regulations by classifying an appropriate transect for these urban-rural interface areas and adapting the regulations for the community

3. Wholesale Changes

- ☐ Preserve agricultural viability by zoning for large agriculture-only districts.
- ☐ Require mandatory annexation as a condition of development approvals in town impact areas (consider a "no objection" clause that is approved by the property owner when annexation is feasible and desired by the town. This clause will make the annexation process predictable and fair).
- ☐ Encourage joint town and county policies that set criteria such as location or size controls to coordinate the development of land instead of insular land use resulting from PUDs. (See Essential Fix No. 3.)

Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes

United States Environmental Protection Agency

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Cover photos (left to right): ***Keene, New Hampshire,*** *courtesy of the city of Keene;*
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CONTENTS

INTRODUCTION

Most rural communities want to maintain their rural character while also strengthening their economies. Many fast-growing rural areas are now at the edge of major metropolitan regions and face metropolitan-style development pressures. They seek to manage new growth in a way that promotes prosperity yet is sustainable over the long run. But even slow-growing or shrinking rural areas, which often suffer from faltering economies and population decline, might find that their growth management policies are not resulting in the prosperity they seek.

Fortunately, a variety of proven tools and strategies can help rural communities thoughtfully consider how and where to grow. For example, communities that want to maintain their rural character and economic vitality could decide to adopt mixed-use zoning for their Main Street buildings and commercial areas, policies to better manage stormwater runoff, and design requirements for complete, connected streets. Strategies like these are used in communities of all sizes around the country. Small towns and rural areas generally have fewer financial, technical, and staff resources to draw on in responding to development proposals and growth pressures than their urban and suburban counterparts. As a result, rural communities need to identify strategies that they are able to implement with their resources.

This publication provides a range of strategies organized around 10 chapters that focus on key issues that rural communities face. It is intended to provide smart growth policy options that communities can implement. These policies can help small towns and rural areas ensure that their development is fiscally sound, environmentally responsible, and socially equitable. This publication is a companion to *Essential Smart Growth Fixes for Urban and Suburban Zoning Codes.*[1] While many of the essential fixes from that document can be adopted in communities of any size, this publication provides additional options specifically for rural communities. This publication does not provide model codes; rather, it offers a range of options communities can consider implementing to make their development patterns more fiscally and environmentally sustainable.

Photo courtesy of EPA

Seneca Falls, New York, has a thriving downtown with streets that are pleasant to walk along. Its "heritage area" designation preserves its history and attracts visitors.

Some rural parts of the United States do not engage in planning, zoning, or creating building codes. Since land use authority largely rests at the local level, local decision-makers have this prerogative. This document contains resources that can help rural communities along the spectrum of local land use controls.

With planning and zoning that supports their vision, rural communities can flourish and improve the quality of life for their residents, attract and support businesses, and provide new opportunities while protecting the way of life they cherish. This document identifies methods for getting the type of development that works best in a rural context.

1 EPA. *Essential Smart Growth Fixes for Urban and Suburban Zoning Codes.* 2009. EPA 231-K-09-003. http://www.epa.gov/smartgrowth/essential_fixes.htm.

SMART GROWTH IN RURAL AREAS

Smart growth development approaches benefit the economy, the environment, public health, and the community as a whole. In rural communities, smart growth strategies address the relationship between the land and the small towns and villages that support rural economies. Working agricultural lands, prairies, forests, and natural resource extraction historically drove the economy in many rural towns. Hamlets and villages grew as places to trade goods and services and as transportation hubs that connected the land-based economy to markets. Historically, these places were economic, civic, cultural, and social hubs. The villages had many of the characteristics that even today are important attributes of attractive, healthy places. Homes were within walking distance of stores and workplaces; land was used efficiently by clustering village-related uses in the village and keeping farms and other working lands as large swathes of land with little or no development to interfere with the economic uses.

The International City/County Management Association's *Putting Smart Growth to Work in Rural Communities* discusses trends affecting rural America today and how rural communities can use smart growth strategies to prosper. That publication suggests that if communities want to maintain their rural character, they should pursue three goals using smart growth approaches:

- Support the rural landscape by creating an economic climate that enhances the viability of working lands and conserves natural lands.
- Help existing places thrive by taking care of assets and investments such as downtowns, Main Streets, existing infrastructure, and places that the community values.
- Create great new places by building vibrant, enduring neighborhoods and communities that people, especially young people, do not want to leave.[2]

By growing and revitalizing historic town centers and ensuring that new growth and development reinforce traditional patterns, rural communities can protect the way of life that their residents treasure while supporting economic growth and bringing new opportunities. *Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes* can help rural communities find the right tools to put their vision into practice.

2 ICMA. *Putting Smart Growth to Work in Rural Communities.* ICMA and Smart Growth Network. 2010. p. 1. http://icma.org/ruralsmartgrowth.

SMART GROWTH PRINCIPLES

Since the mid-1990s, the Smart Growth Network, made up of organizations representing diverse interests, has been identifying best practices, policies, and strategies that help communities get the results they want from growth.[3] The network developed 10 smart growth principles, based on experiences of communities around the country. The principles are flexible enough to apply to all types of communities, from rural to urban.

- Mix land uses.
- Take advantage of compact design.
- Create a range of housing opportunities and choices.
- Create walkable communities.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, farmland, natural beauty, and critical environmental areas.
- Strengthen and direct development toward existing communities.
- Provide a variety of transportation options.
- Make development decisions predictable, fair, and cost-effective.
- Encourage community and stakeholder collaboration in development decisions.

3 For more information about the Smart Growth Network, see: Smart Growth Online. Smart Growth Network. http://www.smartgrowth.org/network.php. Accessed December 21, 2011.

RURAL COMMUNITY CATEGORIES

There are many ways to describe rural communities based on their economic, geographic, or design characteristics. Certainly, each community is unique, and rural communities can include a number of complex and contradictory qualities. However, characterizing them can help identify common challenges they might be facing as well as opportunities that could help them adopt a more sustainable approach to growth and development in the future. Most rural communities can be grouped into one of five categories,[4] though many may fall into more than one:

- *Gateway communities* are adjacent to high-amenity recreational areas such as national parks, national forests, and coastlines. They provide food, lodging, and associated services. Increasingly popular places to live, work, and play, gateway communities often struggle with strains on infrastructure and the natural environment. Many of these communities also experience seasonal population cycles that can strain resources.
- *Resource-dependent communities* are often home to single industries, such as farming or mining, so their fortunes rise and fall with the market value of that resource. A key challenge facing resource-dependent communities is diversifying the economy while maintaining their rural quality of life and character.
- *Edge communities* are located at the fringe of metropolitan areas and typically connected to them by state and interstate highways. Residents have access to economic opportunities, jobs, and services. More affordable housing and access to metropolitan amenities have made many of these edge areas grow at a faster pace than their metropolitan areas as a whole. But precisely because they are such attractive places to settle, edge communities often face pressure to continue to provide more housing and services to new residents.
- *Traditional Main Street communities* have a central commercial street as the focus of the town, with adjacent, compact, established neighborhoods. In addition, historically significant architecture and public spaces provide valuable resources upon which to build. Still, these communities often struggle to compete for tenants and customers with office parks, regional malls, and large stores that rarely locate on rural Main Streets.
- *Second-home and retirement communities* might overlap with some of the above groups, particularly edge communities and traditional Main Street communities. Like gateway communities, second-home and retirement communities struggle to keep pace with new growth while maintaining the quality of life that drew residents in the first place.

The fixes described in this publication are intended to be applicable in each of these rural community types.

HOW TO USE THIS PUBLICATION

This publication sets forth several actions that small-town and rural jurisdictions could take to address some of their most challenging growth issues. Rural communities around the country have used these actions to guide development. These essential fixes, identified by a national panel of rural smart growth experts, can address specific development issues or become a foundation for more comprehensive revisions. This publication describes policy options and does not present a recipe or a prescribed order for implementing these policies. Each community must determine what is appropriate for its needs and context.

Each essential fix contains six sections:

- **Introduction:** A discussion of the issues and growth-related challenges.
- **Response to the problem:** An overview of how local governments might respond.
- **Expected benefits:** How local governments and communities might benefit from addressing the issues.
- **Steps to implementation:** Modest adjustments, major modifications, and wholesale changes that local governments could make to their land use plans and codes to address the issues.
- **Practice pointers:** Common-sense considerations in assessing alternative implementation approaches.
- **Examples and references:** A list of general references on the topic, as well as examples of local government plans and development codes.

4 These five typologies were developed by the authors of *Putting Smart Growth to Work in Rural Communities* through discussions with Smart Growth Network partner organizations as well as organizations outside the network.

In addition, the chapters describe some implementation strategies, financial tools, funding sources, and related policies suited to rural areas, as well as financing and local capacity issues—such as lack of resources, investment capital, and local staff capacity to drive public-private partnerships.

While this publication is divided into 10 fixes, each fix works best when done in combination with others. For that reason, chapters sometimes refer to another chapter. For example, a discussion of directing growth toward town centers is incomplete without a discussion of protecting agricultural and natural lands outside the town. To avoid duplication, each chapter keeps to a fairly narrow discussion and assumes the reader will read the rest of the publication. Also, keep in mind that rural communities have many strategies at their disposal to determine where and how growth happens; this publication looks only at land use strategies and not at the full toolbox. Not every step to implementation is going to work the same way in each community. Regional, socioeconomic, and geographic considerations affect how and whether a particular idea might be implemented locally.

1 DETERMINE AREAS FOR GROWTH AND FOR PRESERVATION

INTRODUCTION

Many rural towns have found they can improve their overall quality of life by determining specific areas intended for growth and those that are to be preserved. A long-term, proactive plan establishes growth priorities. Communities can then review individual development proposals with an eye toward how they connect to comprehensive planning goals. This chapter discusses this issue and ideas for addressing it.

Rural towns and counties are recognizing that they need to designate areas where growth makes the most sense. Communities find this strategy desirable for a variety of reasons:

- It allows them to provide government services and infrastructure more cost effectively.
- It makes it easier to preserve the open space, agricultural lands, and natural resource areas that are critical to rural character and rural economies.
- It lets them provide housing in a variety of types, sizes, and price ranges with access to jobs, services, shopping, schools, and places of worship.
- It reinforces community character based on historic town patterns.
- It creates predictability and guidance for private developers to match the community vision.
- It creates more energy-efficient and sustainable communities that make it easy and appealing for people to walk or bike around town. In addition to reducing air pollution from cars, walking or biking to destinations is an easy way to get more of the daily physical activity that doctors recommend.

To accomplish these goals, local governments often need to revise their land use plans, development codes, and capital improvement plans to reinforce their community's choices about where it wants development to occur. They must also identify growth areas and make them more attractive to the development community than other areas where the community does not want development. This section focuses on strategies for growth areas and town centers.

Photo courtesy of AECOM

Community workshops, such as this one in Bluffton, South Carolina, bring residents together to determine the most appropriate locations for future growth and development.

While this chapter covers steps communities can take to identify designated areas for growth, it does not comprehensively discuss resources and ideas for supporting thriving towns and villages. A discussion of policies that relate to this topic can be found in Chapter 2 of *Putting Smart Growth to Work in Rural Communities.*[5]

RESPONSE TO THE PROBLEM

To designate growth areas in rural towns and counties, communities should undertake comprehensive planning using a participatory stakeholder and citizen engagement process. They also need analysis and data that justify the designation of specific growth areas. Justification might include fiscal impact analysis, cost of infrastructure studies, traffic modeling, water quality assessments, delineation of natural and cultural resource areas, and identification of prime agricultural lands.

5 ICMA op. cit., p. 17.

Many communities have used regional scenario planning, which engages participants in envisioning alternative futures and then models the impacts and benefits of several options. In this process, the resulting preferred vision is often adopted into local and regional plans and policies. The vision also typically describes what makes the community a distinctive and attractive place. Many communities use scenario planning to identify areas for preservation and areas designated for growth. The growth areas are linked by transportation networks that include roads, transit, and walking and biking trails. The preferred growth areas also typically take advantage of existing or planned improvements to other infrastructure. Although scenario planning is especially effective in high-growth areas, it can also be useful in slow-growth or no-growth environments, where growth in outlying areas can leave behind existing homes, neighborhoods, and underused infrastructure. Communities can typically conserve fiscal resources by encouraging development in areas with existing infrastructure or even in areas where infrastructure needs to be updated. However, replacing inadequate infrastructure might not always be cost-effective.

Town centers contain a concentration of land uses, usually commercial, but in many cases, residential and institutional as well. A town center can be the geographic center of a town, or a development built to serve market demand for specific land uses. If sited based on a planning and analysis process as described above, new town centers can provide a high quality of life, housing and transportation choices affordable for people with a range of incomes, many opportunities for social interaction, and cost-effective infrastructure and services. Rather than competing with existing towns, new town centers can develop a symbiotic relationship with surrounding communities through strong transportation connections, including efficient transit service where appropriate, and a shared sense of purpose created through a planning and visioning process.

Growth in many rural towns is so gradual that it is not always perceived as a concern, but at some point, some communities find that many residents oppose growth as increased development and traffic change the community's character. A clear set of principles developed through a broad community process and incorporated into the comprehensive plan can provide a framework for determining whether proposed developments fit with the desired community character and help achieve the community's economic, environmental, and social goals. The comprehensive plan and codes could also require that large development proposals include a charrette[6] to incorporate community input into their designs. For the sake of coordination and resource leveraging, it is helpful for towns to collaborate with surrounding communities to develop a regional approach to resource preservation and stormwater management and provide region-wide standards for streets that help manage stormwater runoff and are safe and appealing to pedestrians, bicyclists, drivers, and transit users.

Photo courtesy of Lancaster County Planning Commission

Central Market in Lancaster, Pennsylvania, is the oldest publicly owned, continuously operated market in the country. It is in the heart of an infill area that took advantage of existing infrastructure to build new offices, stores, and homes.

Since a lack of in-house planning capacity can be an obstacle for small towns and rural counties, regional and state agencies often help localities find the resources to carry out these studies, support and participate in the stakeholder process, and build support for implementation. Some resources are available to enhance local capacity to pursue these strategies (e.g., economic development agency district planning funds or transportation

6 A charrette is a collaborative, multiday workshop that brings together stakeholders in a community to give input on a design issue or a specific development project. It allows meaningful input from the public and gives stakeholders a chance to see and react to how designers incorporate their ideas into the proposed design.

planning funds available through state departments of transportation or regional planning agencies) and to seed desirable investment and development activity.

EXPECTED BENEFITS

- The community develops a vision that values rural character and regulations and design standards to realize the vision.
- Development proposals in towns and town influence areas[7] that meet community growth goals have a more predictable review process.
- When development proposals are coordinated with community growth goals, meet local development regulations, and engage meaningful public input through charrettes, approval is usually quicker and more predictable, and the proposal generates less public opposition.
- Communities make efficient use of existing infrastructure when directing growth to designated areas. Vacant property reclamation strategies and incentives can also be key components of encouraging growth in town centers.
- Directing development to towns or town influence areas reduces pressure to develop on sensitive habitat, agricultural lands, and other open space.
- A more environmentally and economically sustainable community uses less energy by reusing existing structures and offering transportation choices, such as walking and bicycling, that can reduce greenhouse gas emissions and other pollution.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Coordinate with nearby towns and villages to share resources, exchange ideas, and forge partnerships to build and access planning capacity.
- Identify federal grants that can be used to encourage infill and reuse of existing structures in preferred growth areas, such as the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program,[8] the U.S. Department of Agriculture (USDA) Community Facilities Grant Program,[9] and the U.S. Environmental Protection Agency (EPA) Brownfields Area-Wide Planning Pilot Program.[10]

2. Major Modifications

- Identify and map the community's preferred growth areas in comprehensive plans to make it clear to developers and residents where the community wants growth to occur and to protect sensitive natural areas and prime agricultural areas.
- Establish capital improvement plans and adopt capital spending strategies—for transportation (including walking and biking facilities, public transit, and roads), public works and infrastructure, clean water programs, energy facilities, schools, and parks—that support the comprehensive plan's preferred growth areas.
- For communities that have impact or similar fees, create an incentive to develop in areas that have infrastructure to support new development by lowering the fee for those places, or encourage redevelopment of a site by using the impact fee to maintain or improve existing infrastructure. In areas with little or no infrastructure, the costs of providing and maintaining new infrastructure to support new development can be high. Factoring such costs into impact fees should be considered.
- Conduct scenario planning to identify the best areas to preserve and the most appropriate lands to develop, with modeling to measure the performance and impacts of each scenario. Use the results to inform the development of comprehensive plans and investment strategies.
- Establish community service areas that are coordinated with capital improvement plans, investment strategies, and economic development targets. Phase development with the availability of infrastructure as it is approved and constructed.
- Adopt a policy to locate all major local governmental services and offices in the town center or designated growth areas to take advantage of existing infrastructure, support the community's vision for these areas, and encourage private investment nearby.

7 Town influence areas are areas around a town where the town can reasonably expect to have influence over land use and planning.

8 HUD. Community Development Block Grant Program. http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs. Accessed August 15, 2011.

9 USDA. Rural Development Housing & Community Facilities Programs. http://www.rurdev.usda.gov/rhs/cf/brief_cp_grant.htm. Accessed August 15, 2011.

10 EPA. Brownfields Area-Wide Planning Pilot Program. http://www.epa.gov/brownfields/areawide_grants.htm. Accessed August 15, 2011.

3. Wholesale Changes

- Create a special expedited or prioritized review procedure to process development proposals in designated town centers. Establish development standards, such as use requirements, in neighborhood development regulations or a unified development ordinance, which is an ordinance that encapsulates zoning, subdivision standards, urban design, signage, landscaping, and other development standards that are typically separate documents.
- Designate areas for town centers in comprehensive plans where needed. Require a full range of housing types, services, and employment opportunities, and require that the new town be linked to existing development with transportation networks that accommodate public transit, walking, biking, and driving.
- Adopt an adequate public facilities ordinance (where permitted by state code) that sets criteria for utility expansion and service to outlying developments. Require that infrastructure, such as roads, water and sewer service, and schools, be in place when new development is constructed.

PRACTICE POINTERS

- Adopt a comprehensive land use map that depicts preferred development areas and describes clearly the mix of uses desired, community design principles, and the key features desired for each area.
- Town, county, and regional planning staff or municipal boards can review existing policies and determine the need to update current land use codes or undertake wholesale code revisions.
- Coordinate regionally with other local governments to adopt supportive plans and designated growth areas. Incorporate a communication and outreach plan that explains to community members how supportive plans can be implemented, what tools are available to support it (such as Economic Development Administration planning funds and state and federal transportation planning funds), and what benefits can accrue to all communities in the region.
- In many rural communities, plans, codes, and policies are often stand-alone documents, rather than fully coordinated and based on the same fundamental principles. Community staff and officials can create a process for reviewing, coordinating, and combining these documents or at least mark reference points to illustrate connections. These efforts will help rural towns get the environmentally and economically sustainable growth they want.

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2 INCORPORATE FISCAL IMPACT ANALYSIS IN DEVELOPMENT REVIEWS

INTRODUCTION

Many rural towns and counties approve developments incrementally, one project at a time, because planning for development can be hard to predict. In doing so, communities focus on short-term results, not on the long-term implications and impacts of development in aggregate. One result can be a lack of focus on long-term costs and benefits to the local government and the community as a whole. Often, they rely on rough estimates of property and other tax revenues to conclude that the proposed project will benefit the community without examining possible costs. Long-term costs include infrastructure construction and maintenance, special transit service for elderly or disabled persons, emergency services, schools and other civic facilities, and services for employees and residents of new development (e.g., affordable housing for resort workers). Failure to consider such costs before infrastructure funds have been committed can have fiscal and other impacts on residents for years through increased taxes and fewer services.

The economic, social, and environmental impacts of development are often significant. Inserting these considerations into development decision-making can help towns and counties get a fuller picture of the benefits and costs. Perhaps the most significant element for rural communities to consider is the fiscal impact of development. As many rural communities' capacities are stretched, each new development can be a relatively significant impact upon their fiscal sustainability and their ability to serve their residents. Focusing on the fiscal impact of development can help communities determine how best to allocate their resources and make development decisions that benefit residents.

Photo courtesy of Wellington Neighborhood

The cost of the public services new residents will require and the revenues generated from new development are important to assess the fiscal impact of a project, such as the Wellington neighborhood in Breckenridge, Colorado.

RESPONSE TO THE PROBLEM

Some rural towns and counties are taking the initial step of requiring at least a basic fiscal impact analysis for all major developments. Others are going a step further by requiring that:

- The developer provide funds for a consultant (hired by the local government) who can assist the town or county in an unbiased review of the fiscal impact analysis.
- Any deficit must be addressed with funding or other mitigation measures (e.g., by donating land for a school or paying for off-site road improvements).

A simple four-step fiscal impact analysis examines the costs and benefits associated with a project:

1. Estimate the population generated by the development (e.g., the number of new residents, school-age children, and employees).

2. Translate this population into public service costs (e.g., roads, schools, and emergency services) based on costs used in the local or regional market.

3. Project the tax and other local revenues generated by the growth.

4. Compare the development-induced costs to projected revenues and, if a gap exists, determine how to address the shortfall.

While the basic methodology is straightforward, it can also include variables to compare alternative development scenarios, but only if the impact analysis is performed at a conceptual design stage. Variables could include more compact development, larger or smaller lots, adding a trail system, or deleting a school if the development shifts to senior housing (which might increase health care or emergency services costs). The analysis can also look at projected costs per phase, along with total build-out costs, so that infrastructure and expanded services can be provided in line with the estimated completion of each phase.

Where allowed by state law, concurrency regulations let the local government require that all needed infrastructure be funded and in place by the time each phase of a development is completed. If a fiscal analysis shows a development is not financially viable, the local government might choose not to approve the development. Where concurrency regulations are used, communities should consider coordinating with other municipalities in the region to ensure that development does not get pushed to locations outside of areas governed by concurrency requirements.

Once the costs of a proposed development are fully understood and communicated to the community, the local government can require mitigation measures to offset the costs. The municipality could ask the developer to propose mitigation measures to make sure the development pays its own way or to offer compensating benefits to offset community costs. Examples of mitigation measures include building a fire station, building a road connecting the proposed development to existing land uses, donating land for a school, or providing a revenue stream to pay for services the development needs. Even if local governments are not allowed to recover costs, they can still use fiscal impact analyses to help policy-makers understand the development costs and impacts and assess whether certain development types should be encouraged or discouraged in their policies and codes.

A community can conduct a fiscal impact analysis as part of a community or regional scenario planning process, rather than just in reviewing development proposals. In scenario planning, comparative costs, environmental impacts, travel choices, and other factors are used to rate the benefits and impacts of different types and locations of development across the region. Typically, more compact, mixed-use development costs less, has a lower environmental impact, and offers more transportation and housing choices.

EXPECTED BENEFITS

- Local governments will understand the full range of costs and benefits associated with a proposed development and, where allowed by state law, can ensure that costs related to infrastructure and services are recovered as part of the approval process or that mitigation is provided.

- Developments that bring demonstrated benefits to a community are more likely to attract resident and stakeholder support.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Adopt a requirement for a full fiscal impact analysis for all major projects.

- Maintain adequate and current information on the costs of government services so that basic information for fiscal impact analyses is readily available.

- Train local government staff and planning and utilities boards to understand fiscal analysis and how it relates to infrastructure provision associated with development decisions.

- Keep capital improvement plans current and include appropriate development projections.

2. Major Modifications

- Incorporate fiscal impact analysis into county and regional scenario planning and visioning to inform the review and selection of preferred development locations.
- Identify fiscal impact thresholds that a development must meet, such as the maximum increase in bonded indebtedness or amount of remaining water or sewer capacity the community is willing to allocate to one development.
- Require fiscal impact analysis of effects on other service providers (e.g., fire districts or school districts) and surrounding jurisdictions to help ensure that neighboring communities are not burdened by the costs of providing services. If the analysis identifies adverse impacts on other jurisdictions, adopt measures to ensure mitigation (e.g., developer contributions or revenue sharing).
- Require applicants to fund adequate staff time or consulting support (with the consultant hired by the locality, not the applicant) to develop and analyze a fiscal impact assessment.

3. Wholesale Changes

- Adopt a process for measuring the long-term fiscal impacts of development. This process should consider the costs and infrastructure demands that new residents and employees will need (e.g., social services or affordable housing for lower-income workers).
- Mandate a fiscal impact analysis as part of a larger community impact analysis, including environmental, social, and economic development impacts.

PRACTICE POINTERS

- Fiscal impact analysis is an art, not a science. It requires many different assumptions about how a community will grow over time, the pace of absorption of new units in a development, changes in property tax values, and so forth. Communities should revisit impact analyses periodically to ensure that they are on target.
- Fiscal impacts vary with the type of development, its location, the level of community services it needs, and the existing capacity of services and infrastructure. The results of a fiscal impact analysis in a community with existing capacity to provide services and infrastructure will be very different from one that must build new facilities or extend existing service long distances.
- Development impacts are cumulative. One development might have minor impacts, but multiple developments over time could have significant impacts.
- A development could have a positive fiscal impact but also negative environmental and social impacts that need to be evaluated separately.
- Most residential development imposes costs on the community, which can increase over time as systems age and families have more children to enroll in school. Any developer contributions or impact fees should be used to cover anticipated costs over time instead of used once for short-term projects.

Photo courtesy of Albermarle Downtown Development Corporation

Schools such as this one in Albemarle, North Carolina, are community assets that can anchor neighborhoods and provide civic space and amenities for the entire community. However, the costs of adding new schools or expanding existing ones need to be considered in fiscal impact analyses.

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3 REFORM RURAL PLANNED UNIT DEVELOPMENTS

INTRODUCTION

Local zoning codes in many areas permit negotiated developments, which are usually called Planned Unit Developments (PUDs) and can also include larger developments often called master-planned communities (MPCs). PUDs allow communities to overcome some of the strictures of conventional zoning and provide a vehicle for local government officials to negotiate community benefits, such as requiring additional open space, recreational facilities, better design, and developer contributions to infrastructure.

PUDs are often used for large areas that are master-planned by single or multiple property owners or developers. PUDs typically allow greater flexibility in layout, design, and land use than existing zoning and subdivision regulations. However, once a PUD process becomes the primary method of site plan review and permitting, municipalities sometimes are less able to connect the results of these PUDs to local comprehensive plan objectives.

Although originally intended primarily as a tool for major developments in cities and suburbs, PUDs have spread to rural areas because the process is attractive to developers, offering a more flexible way to secure approval for large developments than seeking multiple amendments and variances to a zoning code. However, the PUD approach has proliferated to the point that it has given rise to a host of unanticipated challenges. Few rural jurisdictions have the necessary staff to negotiate development agreements for complex projects. Rural development codes typically have barebones standards and processes governing PUDs and therefore provide little guidance to local officials and few controls to ensure the PUDs are properly located, are designed well, provide adequate infrastructure and community benefits, or are linked to the rest of the community.

Photo courtesy of EPA

Prospect New Town in Longmont, Colorado, is a planned unit development that used flexible development requirements to create a range of housing types and building design. Residents enjoy sidewalks, open space, and nearby services.

Rural communities are recognizing some downsides to relying on PUDs and negotiated developments:

- Large rural PUDs and MPCs often intrude and have adverse impacts on agricultural operations and natural resources, and they can strain local government services and budgets.
- Overreliance on PUDs can create uncertainty for developers when the PUDs are not tied to clear community standards to guide the development approval process. They can also create unpredictability for neighbors of proposed PUDs, who cannot rely on existing zoning or land use plans to protect their rural lifestyle.
- Environmental and design standards are sometimes overridden or ignored in the PUD review process.
- Extra work is created for staff and planning boards who have to deal with multiple mini-zoning codes created for each PUD over time. Exceptions from development standards and other requirements created for one PUD

often differ from those requested by other PUDs, making consistency in decision-making difficult or impossible.

- PUDs tend to be reactive—responding to a proposed development—rather than implementing a broad, collective vision created by the community through a comprehensive plan.

RESPONSE TO THE PROBLEM

Some rural towns and counties have responded by restricting PUDs to the comprehensive plan's designated preferred development areas, forbidding the waiver of environmental and design standards, adopting updated design standards, and specifying minimum levels of community benefits such as open space and street connectivity. In other cases, towns have simply eliminated PUDs and built the necessary flexibility into their zoning codes using performance standards.

Rather than just respond to PUD proposals, small towns and rural counties can adopt zoning and subdivision provisions allowing new village-scaled development with zoning and/or development incentives in locations where the community has decided it makes sense to grow. By mapping the areas the community wants to preserve as working lands or natural resource areas, along with areas where future infrastructure expansion would be cost-effective, a community can steer development to areas where it makes sense to build—and away from the lands it wants to preserve. Instead of waiting to react to each PUD, a community could define the type of development it wants more clearly by adopting a unified development ordinance that combines subdivision and zoning ordinances with street design guidelines, utility requirements, and open space guidelines.

Many communities have found ways to use PUDs to get development that fits with their comprehensive plan, maintains their rural character, and helps meet their overall environmental and fiscal objectives. PUDs are flexible enough to allow an attractive and environmentally sustainable design, but they often need guidelines on how to create traditional mixed-use neighborhoods. These guidelines could include subdivision, streetscape, site planning, and building design guidelines that aim to create a more pleasant, appealing, environmentally responsible, and healthy community.

For instance, a community could maintain some control over PUD applications and overall design by requiring certain features as part of every PUD approval process. These requirements could include:

- Protection of sensitive habitat, cultural resources, and connected, usable open space.
- Street design and connectivity requirements.
- Variety of lot sizes and home sizes.
- A well-integrated mix of uses.
- Design guidelines covering site planning and general building form.
- Provisions for shared parking and on-street parking to use land efficiently.

EXPECTED BENEFITS

- Small towns and counties can use PUDs in areas where development pressures are great and where codes are not yet in place to direct growth. The PUD can provide the flexibility to establish more efficient, connected patterns with compact, mixed-use development and more cost-effective infrastructure.
- PUDs can provide increased predictability in the development review process, with a quicker, more efficient review process and less staff effort to administer development approvals.
- When certain features are part of every approval process, PUD review can require development to adhere to the community's vision and goals as established in comprehensive plans, including preserving rural character and preventing fragmentation of productive agricultural areas and environmentally sensitive and scenic natural resource areas.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Require a mechanism, such as a charrette, to get meaningful public input starting early in the PUD review process and continuing throughout the process.
- Require applicants to pay for additional staff or consultants to help evaluate PUDs, typically through project review fees based on demonstrated costs (where allowed by state code).

- Map important natural areas and cultural resources for the town, county, or region so that as development is proposed, the PUD review process can consider these assets. This mapping will also make it easier to protect these natural and cultural resources (see Chapter 9: Protect Agricultural and Sensitive Natural Areas).
- Limit zoning and subdivision standards (especially environmental and design standards) that can be waived or modified in a PUD process, but encourage desirable development through zoning-related incentives, such as expedited permitting or priority in bonding support or other financial incentives.
- In place of PUDs, create flexible, by-right,[11] mixed-use zone districts adjacent to towns and in town influence areas to accommodate large developments that are in accord with town or county comprehensive plans.

2. Major Modifications

- Establish a minimum list of public benefits that the applicant must commit to providing prior to PUD approval (e.g., setting aside a certain percentage of the site as permanently protected open space).
- Require all PUDs and MPCs to be in accord with comprehensive plan requirements, particularly locating in the plan's preferred growth areas.
- Encourage mixed-use zoning in PUDs, including commercial development that fits the scale of the community, reinforces a sense of place, and promotes walking or biking, such as small stores, community centers, or offices.
- Require a fiscal impact analysis for the PUD process and require that the PUD demonstrate a long-term fiscal benefit to the community.

3. Wholesale Changes

- Require evaluation of PUDs based on street connectivity, lot and home size variety, integration of a mix of uses, adherence to design guidelines, open space connectivity, and parking strategies.
- Create a set of neighborhood development types (high-, medium-, and low-density as well as mixed-use) with related design guidelines that can be the basis for PUDs, and adopt these types into zoning codes. This will help avoid lengthy approval periods, excessive review time, and poor locations.
- Prohibit the use of PUDs in all rural and agricultural zone districts outside of town influence areas unless they are in an approved new town location.
- Strengthen PUD requirements to promote environmental and design standards.

PRACTICE POINTERS

- Consider establishing a detailed list of community benefits expected in return for variations to the desired uses, design, and locations that the community has established. Benefits might include a specified amount of permanently preserved open space, reclamation of degraded sensitive areas, or improvements to roads and other infrastructure. The list provides reassurance to the community and some predictability for developers.
- Give priority to PUD or MPC applications that are in the town, adjacent to the town, or in town influence areas,with additional preference to proposed developments that incorporate existing structures or redevelop on vacant properties.
- To the maximum extent possible, use development standards from existing zoning and subdivision ordinances to avoid creating PUDs that are mini zoning districts and difficult to administer.

9 "By-right" means that the project is permitted under current zoning and needs no special review or approval.

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4 USE WASTEWATER INFRASTRUCTURE PRACTICES THAT MEET DEVELOPMENT GOALS

INTRODUCTION

Finding wastewater management solutions for new developments, revitalizing areas, and failing systems is critical to protecting water quality and human health. Many rural towns across America want to direct growth to the most suitable areas, such as near fire stations and schools, or extend existing villages, but they are struggling to find the most appropriate wastewater infrastructure solution, and some approaches can have unintended consequences.

Additionally, many rural communities and small towns must address failing wastewater systems, including septic systems. Addressing the environmental and public health concerns associated with failing septic systems can be difficult in small towns and rural areas. Management, maintenance, and compliance can be challenging, particularly in smaller communities, for all types of wastewater treatment. This issue is particularly relevant in states that are largely rural or have not widely installed sewer service. Seventy percent of Vermont towns, for example, do not have public wastewater treatment.[12] Communities without sewers tend to be small. In Indiana, for example, 88 percent of communities without sewers have 200 or fewer homes; in Iowa, incorporated communities without sewers have 64 homes on average.[13] Based on the size and location of these communities, it is often not feasible to extend to them sewer lines from existing treatment plants.[14]

Photo courtesy of James Bilbrey via Flickr.com

Selecting the appropriate wastewater management system can help communities protect their water resources. The city of Bayfield, Wisconsin, on the shore of Lake Superior, worked with the surrounding township to build a regional wastewater treatment plant that would better protect the lake and help preserve the community character and clean water that attract tourists.

The design and location of a community's wastewater infrastructure can affect its future development patterns, natural and agricultural areas, and health of watersheds.

RESPONSE TO THE PROBLEM

Rural communities and small towns come in all shapes and sizes, as do their corresponding wastewater infrastructure needs and solutions. No single solution will be appropriate for every community. Understanding the relationship between wastewater infrastructure and community growth can help communities make better choices and protect water quality, human health, and the environment.

An important first step for any rural community is to protect existing investments, which includes identifying what systems are currently in place and their state of repair. Rural communities and small towns can inventory existing systems, educate households with septic systems about the importance of regular system maintenance, and require all systems in their jurisdiction to be inspected and maintained. When poorly managed and

12 Vermont Department of Housing and Community Affairs. "Background Report: Improving Wastewater Treatment Options for Vermont's Unsewered Villages." 2006. http://www.dhca.state.vt.us/Planning/VillageWastewater.htm.

13 Cunningham, S. L. *Do You Want Utilities With That? Avoiding the Unintended Economic Consequences of Poorly Planned Growth on the Provision of Water and Sewer Service.* Center for Environmental Policy and Management, University of Louisville. Summer 2006. http://cepm.louisville.edu/Pubs_WPapers/practiceguides/PG14.pdf.

14 EPA. *Handbook for Managing Onsite and Clustered (Decentralized) Wastewater Treatment Systems: An Introduction to Management Tools and Information for Implementing EPA's Management Guidelines.* 2005; updated 2010. http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=289.

maintained systems fail to adequately treat wastewater, the municipality can end up bearing the cost of upgrading the systems.

Rural communities and small towns can reap significant savings by investing in their existing water infrastructure. In tough economic times, regular maintenance expenditures can become targets for budget cuts, especially when the infrastructure is underground and only "seen" when problems arise, such as sewage flows into nearby streams. But the costs of repairing problems, including degraded streams and possible loss of tourist revenue, can be higher than the costs of regular maintenance.

Planning for growth is essential for rural communities that want the benefits associated with growth while preserving their rural character. When development design and open space preservation are decided one subdivision at a time, rural communities can lose their ability to take advantage of excess capacity or leverage a planned wastewater system to accommodate nearby growth. Focusing on individual lots or even individual neighborhoods forces the community to address wastewater needs site by site, which can be ineffective at protecting water quality or supporting growth. Processes like visioning exercises (see Chapter 1: Determine Areas for Growth and for Preservation) can help communities choose the type and location of development they want.

In addition, rural communities could consider regional planning goals in addition to their own goals for growth and development. Looking at the broader region also allows communities to consider cumulative impacts on the watershed from their development decisions and to leverage and coordinate their wastewater infrastructure strategies and investments. Then communities can choose a wastewater management system that is consistent with their vision for growth, supports that growth, and protects public health and the environment.

Several types of wastewater systems are available to rural communities and small towns. Not all of these systems are appropriate for all types of rural communities, as some systems can contribute to dispersed development patterns, ineffective natural resource protection, and fiscal inefficiencies. By selecting and using appropriate wastewater infrastructure, rural communities can protect their water quality and public health in a way that supports their other community goals, such as maintaining rural character or promoting thriving town centers. Wastewater system options include:

- *Septic systems*.[15] Rural communities are often served by conventional on-site septic systems, as they work well for single homes in remote areas. However, traditional septic systems might not be appropriate to support a new subdivision or cluster of new homes. Using individual septic systems in these scenarios without corresponding development planning can encourage low-density, dispersed development, which can significantly alter the rural landscape and degrade natural resources.
- *Cluster systems*.[16] Cluster systems can create more compact development and can help support a rural community's growth goals. However, using these systems outside of a comprehensive development plan can lead to the creation of tiny pockets of housing that break up large, contiguous agricultural or natural areas and are far from jobs, schools, stores, or other amenities. To use these systems effectively, rural communities should use them in the areas they have designated for growth.
- *Advanced technologies*.[17] Advanced treatment technologies generally have a smaller footprint and can treat more wastewater on less land, which can allow more compact development. They also can treat wastewater in amounts comparable to centralized sewage systems, which means larger areas or neighborhoods can be serviced. However, if applied outside of the context of a comprehensive development plan, advanced technologies can allow development in areas not accessible for conventional treatment, such as areas that communities want to preserve as open space or farmland. Like cluster systems, without a comprehensive development plan, these systems can facilitate dispersed development patterns and are most effectively used in areas designated for development.

15 A septic system is a type of decentralized wastewater treatment that consists primarily of a septic tank and a soil absorption field. Each septic system typically occupies a relatively large area, and systems must have adequate spacing and distance from wells and surface waters.

16 A cluster system, also called a shared or community system, is a type of decentralized wastewater treatment system that serves more than a single home or business.

17 Advanced treatment systems encompass a broad range of technologies. The unifying feature is a separate treatment unit next to the septic tank that treats the effluent before it is discharged to the drainfield (a below-ground absorption field, also called a leach field).

- *Centralized sewerage*.[18] Centralized systems have typically been used in cities and towns. Over the past several decades, centralized systems have been used to expand into farmland or other rural landscapes at the edge of established communities. In addition, some communities have used centralized treatment to replace failing septic systems with the goal of protecting public health. However, expanding centralized sewer systems without a development plan can enable and encourage dispersed development in rural areas, which can create pressure to attract additional ratepayers to support a wastewater treatment plant and conveyance system. A centralized sewer system can attract development regardless of whether it is in the most appropriate area for growth. Rural communities might want to limit the expansion of centralized treatment to existing developments and established planned growth areas. Doing so also allows coordination with other investments in transportation, housing, and jobs.

One important and often overlooked strategy for communities is identifying where existing wastewater infrastructure has excess capacity. Neighborhoods with existing (or excess) capacity could support additional growth. This strategy can be effective at accommodating new development within existing system limits.

Regardless of the system used, communities might need to align local development regulations with wastewater treatment standards to support a range of wastewater systems. For example, local regulations sometimes limit the use of some types of decentralized systems, rather than requiring a certain level of performance and allowing any system that can achieve that performance level. Such regulations can lead communities to choose other systems that might not be adequate to handle the community's wastewater, which could then degrade public health and water quality or lead to an expensive sewer expansion that encourages dispersed development. In addition, codes for new on-site wastewater treatment systems should be consistent with existing and future land use plans.

Additionally, some municipalities have used wastewater treatment standards that prohibit new decentralized wastewater treatment systems as a way to rein in growth. However, such standards can have the unintended effect of restricting wastewater treatment options that are compatible with development goals. For instance, many communities have sites where development is desired or has already occurred but centralized sewerage is financially or logistically impractical. These communities need the flexibility to choose wastewater treatment options that protect water quality while allowing growth and development.

A pressing problem for many rural communities is how to address failing septic systems, which pollute groundwater and cause water quality problems for nearby water bodies. A common response to this problem is to replace these systems with centralized wastewater treatment, which can lead to additional growth in areas that the community would prefer to remain undeveloped and create pressure to operate and maintain sometimes complex centralized systems. Many times, addressing these failing septic systems is a priority for the local and state government, but the challenge is to how to address the problem without inadvertently encouraging development in areas not intended for growth. Incremental approaches could include:

- Offer incentives or technical assistance to homeowners to replace their failing septic systems. In some rural areas, neighborhoods with failing septic systems are near an important natural resource, such as a lake or mountain range, which is an economic driver for the community. In these instances, the municipality might be able to leverage local businesses to help create an incentive fund.

- Create a municipal septic management district or a responsible management entity (RME)[19] responsible for the repair, replacement, and maintenance of homeowners' septic systems. In this case, the municipality or the RME can pay for or organize the replacement of the failing system. The RME would then be responsible for the ongoing maintenance. The homeowner would pay a fee for this service, similar to the sewer fee homeowners pay on centralized treatment systems. Wisconsin uses this approach.[20]

18 Centralized sewerage collects and transports household sewage via a network of pipes and pump stations to a municipal treatment plant. Most commonly used in cities and small towns, centralized treatment systems treat waste flows and protect water quality but are also the most expensive system.

19 For more information on RMEs, see: EPA. *Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems*. 2003. http://www.epa.gov/owm/septic/pubs/septic_guidelines.pdf.

20 Wisconsin Department of Safety and Professional Services. "Safety and Buildings Division Private Onsite Wastewater Treatment Systems." http://dsps.wi.gov/sb/sb-powtsprogram.html. Accessed January 5, 2012.

- Create indicators or criteria to determine when a neighborhood with failing septic systems might be a good candidate to connect to a centralized system and when it should consider different alternatives. For example, areas planned for additional growth with moderate densities might be better candidates for centralized systems. Areas not planned for growth or for very low densities, such as one unit per 20 or more acres, might be better suited to septic replacement. Possible criteria for centralized systems could include:
    - Any structure served by an expansion must be on a site with access to existing roads, water, and utilities and within or contiguous to existing development.
    - Collector lines connecting a home or business to the main trunk line must be no longer than 1,000 feet.
    - Additional infrastructure investments, such as transportation, schools, or additional housing, are likely.
    - The context, including density of surrounding development, condition of surrounding wastewater systems, or proximity to an existing or emerging town center or employment center, is appropriate for a centralized system.

Considerable costs can be associated with wastewater treatment systems, especially if the new system is intended to support a new development or housing cluster. Building, operating, and maintaining new infrastructure can divert money from badly needed repairs and upgrades to existing infrastructure, so rural communities need to carefully consider where and how to pay for new wastewater infrastructure. Many different strategies are available to help rural communities maintain and finance their wastewater infrastructure, including:

- *Impact fees*. Some communities require new developments to pay an impact fee that would finance the wastewater system construction costs. As part of this strategy, communities could consider requiring long-term financial maintenance plans for any new decentralized system when reviewing plans for approval. If such a plan is not established before installation of these systems, municipalities might find themselves responsible for the continued operation, maintenance, and repair of failing systems.
- *Performance bonds*. A community could require a performance bond for any decentralized system, which could provide the community with some guarantee of the effectiveness of the installed system. A performance bond or escrow account could be used to cover future operation and maintenance costs.
- *Land tax*. The community could require any development on pristine land to pay a premium land tax. These funds could then be used to support the repair or replacement of failing systems as well as the revitalization of older neighborhoods or town centers.
- *Maintenance agreements*. Rural communities could require maintenance agreements between a property owner and a maintenance firm or the municipality. These agreements could provide the rural community some guarantee of effective management and maintenance of the new system.

There is no single, simple solution for managing wastewater in rural communities and small towns. Planning for growth and examining the range of possible consequences from water infrastructure investments is critical. Doing so allows the community to balance its water infrastructure needs, such as accommodating new growth or alleviating an existing problem, with its environmental and public health protection goals.

EXPECTED BENEFITS

- Aligning land use policy and public investments in water infrastructure can help rural communities and small towns save money by concentrating services.
- By addressing wastewater needs, rural communities can provide additional capacity for growth, which can enhance the potential for economic development. Providing attractive options for in-town development can protect the rural character of outlying areas.
- A comprehensive regional plan for wastewater treatment infrastructure can improve water quality, protect public health, safeguard investments in existing infrastructure, and ensure that land use plans can be implemented as desired.
- A user-funded management program for decentralized wastewater treatment systems can protect public health and local water resources while allowing growth in town centers.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Establish processes to align water infrastructure investments with other public investments such as transportation, housing, and schools.
- Inventory existing wastewater infrastructure, assess current conditions, and update this inventory regularly.
- Identify excess capacity in existing infrastructure so that development can be directed to areas that can support additional growth, making the most of infrastructure investments.
- Develop "fix it first"[21] criteria for water infrastructure investments.
- Establish a public education program on the importance of regular maintenance for septic systems and support homeowners with regular inspections and technical assistance.
- Revise local regulations if necessary to allow the range of decentralized systems that are able to meet performance standards consistent with local water quality goals and land use plans.[22]

2. Major Modifications

- Delineate growth areas where compact development can be located, and create policies that direct development into those areas based on infrastructure availability and preservation of open space. Designate areas for new investments in water infrastructure. Reinforce these designations in all plans, policies, and regulations.
- Require long-term financial maintenance plans for any new water infrastructure, particularly decentralized systems, when reviewing plans for approval.
- Establish a program to manage all decentralized wastewater treatment systems, including requiring homeowners to have their systems inspected or pumped on a regular schedule and to repair or replace failing systems and cesspools as needed.
- Require users of decentralized systems, such as septic or cluster systems, to pay regular service fees to fund the regular maintenance and management of these systems, just as users of centralized sewerage facilities pay for comparable services.
- Require developments in previously undeveloped areas to finance all their wastewater system construction costs.
- Require performance bonds for new, noncentralized wastewater systems.
- Charge initial impact fees and/or assess a regular utility fee to cover county or regional management oversight costs, including the development of a tracking program to oversee maintenance and staff time spent on ensuring compliance and conducting inspections.

3. Wholesale Changes

- Establish a mechanism for regional planning of wastewater infrastructure that can cut across political boundaries and overcome fragmented system ownership and operation.
- Develop a policy for decentralized systems, particularly septic systems, that includes processes for permitting such systems, replacing failing systems, and identifying when centralized treatment might be warranted.
- Create a septic management district or responsible management entity.

PRACTICE POINTERS

- Base wastewater treatment decisions on the community's water quality, public health, and land use goals.
- Assess capacity in existing treatment plants to determine where planned growth can be accommodated.
- Price services to reflect the full cost of building, operating, and maintaining a system. Accurate pricing is critical to ensure proper and efficient operations and to send a signal to customers about the true cost of treatment options for different types of development.

21 Under a "fix it first" policy, a community invests in fixing and maintaining existing infrastructure (e.g., roads and bridges) before it spends money on constructing new infrastructure.

22 The National Onsite Wastewater Recycling Association has developed a Model Code Framework to help states and localities resolve conflicts with the permitting and use of decentralized systems. See: National Onsite Wastewater Recycling Association. *Model Code Framework for the Decentralized Wastewater Infrastructure.* 2007. http://www.modelcode.org/publications.html.

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5 RIGHT-SIZE RURAL ROADS

INTRODUCTION

Rural roadways help define rural character and community image—from a narrow, winding road through the mountains to a walkable, tree-lined neighborhood street to a bustling downtown Main Street. Many residents in rural areas want safe roads that also maintain a rural character and avoid the uniformity frequently imposed by conventional roadway design standards. State departments of transportation and local governments are also concerned about ever-increasing costs to extend and maintain roads required by dispersed, large-lot development. The ownership, funding, operation, and design control of streets is complex, with roads owned and operated by cities, towns, counties, state agencies, or even private entities and often subject to federal transportation policies, further complicating transportation and redevelopment efforts.

In many rural towns, the Main Street is a state road and under state control. Fast-moving through traffic comes through these towns' central business districts, which can make it difficult for the towns to maintain traditional Main Streets with local-serving stores and a strong sense of community character. As the street needs to serve not only local residents, but also freight and through traffic, redevelopment can be challenging. However, it can also be an opportunity to work with the state department of transportation to use transportation funding to redesign a road so that it works better for the community as well as for through traffic.

Communities across the country are investing in streetscape projects, area planning, and rezoning to encourage infill development along their commercial corridors. There are usually economically obsolete and/or underused real estate assets, known as greyfields, and brownfield properties along these aging corridors, often at key intersections and within walking distance of surrounding residential neighborhoods. Redevelopment on underused or vacant properties can provide housing near services and current or potential transit routes. The current or future transit service typically available along these corridors, coupled with nearby walkable destinations, offers more convenient and affordable transportation choices for residents. Because many of these corridors are state highways, communities can often combine state transportation funding with local funding and developer investments for cost-effective enhancements that improve the street's aesthetics, traffic capacity, and safety for all users.

Photo courtesy of Harbor House Publishers

Boyne City, Michigan, has revitalized its downtown in part by ensuring that pedestrians and bicyclists, as well as drivers, feel safe and welcome. The crosswalk and curb bulb-outs narrow the street to calm traffic and make crossing the street easier.

Related non-transportation infrastructure, such as water, sewer, and stormwater systems, also faces fiscal challenges due to decades of expansion and increasing costs for maintenance and replacement. By coordinating planning and project development for these systems with transportation networks and land use, communities can use their limited funds more efficiently to develop more compact, cost-effective systems. This coordination will particularly help stormwater systems, which can be overloaded with runoff from wide streets.

RESPONSE TO THE PROBLEM

Many communities are finding new approaches to balance the needs of local pedestrians, shoppers, employees, business owners, and residents with the need for through traffic, including freight, to move safely and efficiently. Balancing these needs recognizes that good state highways and strong Main Streets are both critical to a community's economic vitality.

Narrower streets naturally calm traffic, while wider streets encourage faster driving regardless of posted speed limits. Pedestrians and bicyclists feel less safe near fast-moving traffic. In districts like Main Streets where a community wants to encourage foot traffic to support stores, pedestrians must feel safe and comfortable walking along and crossing streets. The same street design changes that calm traffic also make streets more attractive, are safer for pedestrians and bicyclists, and can help protect a historic Main Street's distinctive character. Extending walkable streets through neighborhoods gives residents more choices for getting around, and making it safe and convenient to walk or bike helps people to incorporate regular physical activity into their daily routines as recommended by the medical community. Complete streets—streets that are designed for pedestrians, bicyclists, transit users, and drivers—provide these options for residents.

A good walking environment in rural areas and around towns can include trail networks that are fully integrated with the on-street pedestrian and bicycle network, so that residents can use trails and greenways from outlying areas to get to and from town, not just for recreation. An integrated network of complete streets and trails should connect rural and in-town neighborhoods, transit routes, downtown, neighborhood parks, and recreation areas, so that walking, biking, and transit are fully supported transportation choices. The network should include safe street crossings using techniques appropriate to the town's character and context, such as mid-block crosswalks, median islands, curb bulb-outs to shorten crossing distances, or roundabouts at key intersections. A well-connected network gives people more route choices instead of forcing all traffic onto one wide arterial street, so streets can be narrower. Typically, allowing narrower streets requires adjusting the subdivision ordinance and street specifications. Making sure that streets are right-sized—in other words, only as big as required—can save on construction and operating costs.

Outside of the downtown, many rural towns have corridors of spread-out stores and other commercial uses. In many places, the streetscape is designed for cars to move quickly, not for people to walk. Redeveloping these corridors is an effective way to add new housing, shopping, and community facilities near existing neighborhoods. Communities can also improve stormwater management by using green infrastructure features, like swales, rain gardens, or pervious paving, during redevelopment for both new and rebuilt streets and parking lots. As part of the comprehensive plan and zoning updates, revisions to subdivision and street design guidelines or streetscape standards could include:

- Revisions to the road classification system to incorporate a gridded street network.
- Reduced design speeds to allow narrower streets and wider sidewalks.
- Reduced street width standards for most local and connector streets.
- Intersection designs with reduced turning radii and safe pedestrian crossings.
- Street trees in tree wells large enough to accommodate their root systems to create a continuous shade canopy and to capture, slow down, and infiltrate rainwater.
- Green infrastructure stormwater management features to promote infiltration.
- Street lights at a height that provides good lighting for pedestrians as well as drivers, with fixtures that direct the lighting to the street and preserve dark skies.[23]
- Standards ensuring pedestrian and bicyclist safety, particularly around schools.

EXPECTED BENEFITS

- Connected street networks, combined with compact development and right-sized streets, give residents and visitors more choices in how they get around, which can help reduce traffic congestion on major roads.
- Narrower streets with traffic-calming features are safer, with fewer and less serious crashes due to slower travel speeds.

23 For sample Dark Skies ordinances, see: International Dark Sky Association. Home Page. http://www.darksky.org. Accessed December 21, 2011.

- Narrower streets use less pavement, which can be coupled with green streets techniques—using vegetation and permeable surfaces to manage stormwater at its source, make walking and bicycling more appealing, and beautify the streetscape—to reduce runoff and improve water quality.
- More attractive and safer streetscapes help support redevelopment and economic prosperity by making these public spaces more inviting and encouraging foot traffic that brings more customers to stores.
- Transportation options, especially biking and walking, help promote healthier, active lifestyles while reducing greenhouse gases and other pollution. They can also help reduce the costs of owning and operating a vehicle.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Conduct a walking audit of neighborhood streets, reviewing the street widths and other characteristics, including those that seem to work well, as a first step in developing new street design guidelines based on the existing characteristics.
- Start a street tree planting program, since shade and buffering from vehicles are critical to pedestrian comfort; street standards could encourage or require tree-lined streets.
- Encourage and permit rain gardens and other green infrastructure techniques to slow, filter, and absorb water while making the street greener. Rain gardens and similar techniques can provide a landscaped zone between the sidewalk and travel lanes, buffering pedestrians from the speed, noise, and danger of moving traffic, or can be installed in curb extensions at crosswalks.
- Conduct a parking survey to count all available public and private parking spaces in the downtown area as a first step in developing a parking strategy. This strategy should look realistically at the amount and location of parking needed for the entire district, rather than requiring each property to provide all of the parking spaces potentially required for its operations.
- Create a bike/pedestrian plan to identify ways to make walking and bicycling safer and more appealing.

2. Major Modifications

- Develop and adopt street connectivity regulations for new development areas.
- Try a "road diet" that reduces the number of through-lanes on a street by allocating excess capacity to parking lanes, bike lanes, landscaped medians, or sidewalks. After careful review of current and projected traffic numbers, many communities have found that four- and five-lane roadways can be reduced to two- or three-lane configurations. Some communities have found that doing a sample road diet on a few blocks of a single street creates a demonstration project that helps show the benefits and low negative impacts of narrower, greener streets.
- Encourage alleys in compact, walkable residential districts, but with a narrower paved or graveled width (usually 10 to 12 feet) and an easement for utilities (usually 20 feet overall). In a residential grid, alleys should connect across blocks to make garbage pickup easier. In commercial areas, most communities that have alleys require them to be at least 24 feet wide to allow dumpster access and deliveries.
- Require shared parking for commercial businesses, public and community facilities, and downtown developments. Develop a parking management plan to take advantage of existing supply, and reduce parking requirements for new buildings and redevelopment accordingly.
- Create and implement a comprehensive streetscape improvement plan for major commercial corridors to improve access for public transit, bicyclists, and pedestrians.

3. Wholesale Changes

- Adopt a complete streets policy to require bike, pedestrian,and transit facilities on all new or rebuilt local roads.[24]
- Conduct a planning study for a major corridor to re-engineer the roadway and plan for development that will be "transit ready" when bus or other transit comes. Communities can implement this approach gradually through site-planning requirements, modifications to mixed-use requirements,

24 According to the National Complete Streets Coalition, as of December 2011, 314 communities have adopted or pledged to adopt complete streets policies. For more information, see: National Complete Streets Coalition. "Complete Streets Atlas." http://www.completestreets.org/complete-streets-fundamentals/complete-streets-atlas.

density requirements, and parking regulations as the transit system is enhanced and extended.

- Convene a regional task force—including representatives from counties, towns, regional agencies, and the state department of transportation, among others—to review policies, guidelines, and underlying legislation and help determine changes that would allow and encourage new development to be more compact and connected, with less environmental impact and safer, more convenient transportation choices. In addition to interagency coordination, identify potential modifications to regional or state standards, such as street connectivity, access management, and drainage standards, that would make it easier for localities, developers, and builders to deliver more environmentally sustainable transportation networks and communities.
- Require that all new roadways and trails follow design and connectivity standards and that any new development reserve terminus points to adjacent undeveloped property for future required connection.
- Convert one-way streets to two-way streets to improve walkability and mobility and make it easier for customers to reach businesses in the town center.

Photo courtesy of Dan Burden, Walkable & Livable Communities Institute

Hamburg, New York's Main Street has on-street parking, which helps calm traffic; bike lanes marked with colored pavement; and clearly marked crosswalks with curb bulb-outs to shorten crossing distances.

PRACTICE POINTERS

- Using green streets techniques during redevelopment of commercial properties for both new and rebuilt streets and parking lots can better manage stormwater while making the street more attractive and appealing.
- Review redevelopment standards and regulations to identify obstacles, determine possible incentives, and encourage redevelopment of properties along existing roadways.

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6 ENCOURAGE APPROPRIATE DENSITIES ON THE PERIPHERY

INTRODUCTION

Rural communities generally want to remain rural or maintain their small-town character. Many of these communities encourage low-density development in the belief that it will maintain the rural character. However, low-density developments are usually more suburban than rural in nature and frequently use suburban standards for streets, landscaping, setbacks, and lot sizes. For communities trying to preserve rural character, development of 2- to 10-acre lots is particularly challenging. Lots of this size pose a host of problems that often undermine rural character and make it difficult to protect natural and fiscal resources. These include:

- Infrastructure and services are more costly and inefficient to provide.[25]
- Residents demand services, such as road maintenance and recreational facilities, but the supporting tax base is inadequate to provide these services.
- Productive agricultural lands and sensitive natural areas are fragmented, which makes farming or ranching more difficult and disrupts natural habitats.
- Domestic animals and trash are introduced into agricultural areas and wildlife habitat.
- Future town-level development is often difficult or impossible if the development does not include easements for central water or sewer lines or drainage or has limited and disconnected road rights-of-way.
- These lots often rely on septic systems, which can fail (see Chapter 4: Use Wastewater Infrastructure Practices That Meet Development Goals).

Photo courtesy of EPA

Development on the edge of town, as in Bel Air, Maryland, can include walking paths to transition between homes and open space.

- Directing growth to existing towns uses infrastructure in which public money has already been invested. Development that is outside of these areas does not take full advantage of these taxpayer investments.
- Large, spread-out lots make it difficult to walk or bike to destinations, forcing residents to drive everywhere, increasing air pollution and greenhouse gas emissions from driving and making it less convenient for people to work regular physical activity into their daily routines.

The density of development helps shape the character of a community. High rises evoke big cities; subdivisions of single-family homes are typical of many suburbs. Farms, villages, and towns with small, walkable downtowns are typical of rural settings. Densities vary by place and circumstance; one key to preserving a sense of place and improving the community is to use the appropriate density for the context.

Rural communities often allow land development patterns that are not dense enough to provide cost-effective services and infrastructure, but that are too dense to maintain a truly rural feel. Such development patterns typically fragment agricultural

25 For example, one study describes the potential infrastructure and development cost savings of traditional neighborhood development versus conventional development. See: Ford, J. "Comparative Infrastructure & Material Analysis of Smart Growth & Conventional Projects." Morris Beacon. January 13, 2010. pp. 3-6. http://www.morrisbeacon.com/media/portfolio-projects/research/MBD-EPA-infrastructure.pdf.

lands and natural resource areas, which can harm the area's economic and environmental health.

Typical housing densities of about two to four units per acre close to town, and one unit per 2 to 10 acres in more rural areas, can create problems for rural communities. These densities result in lots that are too big to mow easily and usually too small to farm. One narrow circumstance in which this pattern can work is in some areas near cities, where 5 to 10 acres can support a productive farm-to-market business.

The appropriate density depends on regional context; what makes sense in rural Virginia might not be the right density in Montana. In places close to major cities, five units per acre might make sense, while in ranch lands in the West, one unit per 160 acres might be appropriate.

Appropriate density also depends on the community's proximity to cities and to agricultural or natural resource areas. Rural communities on the periphery of cities usually need to accommodate growth, so they need to determine the right density to make sure that the inevitable development is done in a way that enhances the entire community. In communities that are surrounded by open space and that are not experiencing much growth, the edge can be a transition zone where clustered homes on small lots give way to agricultural uses.

A variety of factors fuel low-density development, including:

- People want to move to rural communities for the quality of life.
- Many people want affordable second and vacation homes in rural areas.
- Rural communities want to grow and to generate jobs.
- Greenfield land typically can be developed easily under current zoning with no special approvals.

Dispersed development typically features single-use pods of homes or commercial uses that are not connected to other places. These places lack a town center with a concentration of other uses. To convert these areas into a pattern that can thrive over time, rural communities could designate small town centers. Directing development to those centers could reduce travel between spread-out housing subdivisions or could at least shorten the driving time between locations. These clusters of more intense development with a mix of uses will become gateways to the homes and businesses located nearby.

RESPONSE TO THE PROBLEM

As discussed above, densities that are inconsistent with community character in rural areas create a development pattern that can be worrisome from fiscal, environmental, social, and health perspectives. Developments that provide transportation options, opportunities to access a range of businesses, and access to open space are more likely to sustain themselves over time by attracting and retaining businesses and residents and by using resources efficiently. A community should determine what type of place it is trying to be and then plan for development patterns and associated densities accordingly. There is no specific formula or metric to apply. Addressing this issue is a nuanced process that requires understanding that density ultimately characterizes an area, no matter what a future land use map might indicate. For example, if subdivisions with typical suburban densities are proposed and built, they will likely attract similar densities and commensurate uses, such as commercial shopping strips. Connecting development decisions to the plans that have been developed will help ensure that the community gets the type of development it envisions.

One way to deal with this density context challenge is for communities to make sure that their local comprehensive plans direct new development to areas that are within a natural edge to the community. For example, a major road or a river might provide a barrier to expansion and clearly define an edge to the community.

Another idea for addressing the density context is to expand the town's street pattern (often a terrain-modified grid) while using existing infrastructure capacity, with development ending at an agricultural zone on the community's edge. Some communities reinforce this approach by limiting utility extensions and prohibiting septic systems in the undeveloped land beyond the edge of town. This process will be most effective once the community has committed to this development pattern, as it can be continued outside of the core boundaries of the town and extended to create a consistent density.

These remedies address only the properties at or near a town's edge. Equally challenging are subdivisions and large, freestanding residential and commercial developments scattered in more remote rural areas. These developments are usually under county purview, so dealing effectively with them requires cooperation between municipalities and counties. In these cases, it is important to a town to have a strong relationship with the county government to ensure that there is consensus on how to plan for new development. For instance, questions that will need

to be addressed might include: Will the town's development densities be continued in targeted areas in the county to create consistency? What are appropriate densities for transition areas that are acceptable to both the town and county? Answers to these questions require discussion and information exchange.

To get public support to implement changes, communities might need to educate municipal staff and officials, the general public, and other stakeholders about the advantages of more compact development—for example, making stores, schools, parks, and other amenities more economically viable and easier for residents to get to by putting them closer to homes; economies of scale in providing services; and fiscal responsibility. Outreach is typically most effective when it is part of a broader community or regional planning process. Education and understanding can help develop the political will to adopt and enforce zoning codes, development policies, and incentives that will encourage the desired development patterns.

EXPECTED BENEFITS

- Having densities set in advance for designated growth areas gives landowners and developers more predictability.
- More compact development reduces taxpayer costs for local government-provided infrastructure and services.
- Compact development accommodates more growth in developed areas, helping to preserve large contiguous blocks of open space, agricultural lands, and natural resource areas such as wetlands and wildlife habitat.
- Compact development reduces interference with agricultural operations and helps keep farming and ranching viable in the community.
- Development that is compact and well-connected makes walking and biking more appealing, which can make it easier for people to work activity into their daily lives and improve their health.
- Shorter driving distances and more transportation options help reduce greenhouse gases and other pollution.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Develop design regulations that require street connectivity with adjacent neighborhoods, and create land use district transitions to adjacent agricultural or undeveloped areas.
- Allow cluster or conservation subdivisions at the edge of town to transition to true rural areas (see Chapter 7: Use Cluster Development to Transition From Town to Countryside).
- Designate locations for small hamlets in rural areas to serve as local service centers for residents. Focus public efforts and programs such as outreach from the chamber of commerce for small business development on these centers to help develop viable small businesses and services.
- Prioritize public works improvements and investment in existing town business districts. Create incentives to encourage well-designed development adjacent to town to make the best use of these investments.

2. Major Modifications

- Adopt town and county comprehensive plans that recommend appropriate densities in town influence areas.
- Establish community service areas in comprehensive plans that limit service provision to towns and town influence areas.
- Adopt true agricultural zone districts (one unit per 20 to 80 or more acres). The size of these districts can vary somewhat depending on geographic region, sites, soils, and the type of agricultural business. Encourage use of conservation easements in these districts.
- Require minimum densities in areas designated for growth.
- Require cluster or conservation subdivisions to be located at the town's edge to provide transition to rural areas. Do not allow them in active agricultural areas or in sensitive natural areas outside town influence areas.
- Revamp the annexation policy to support appropriate densities on the periphery of growth areas. Depending on local context, communities annex land to expand the tax base or to ensure that a particular area is developed in a specific manner once zoning is applied (see Chapter 8: Create Annexation Policies and Development Standards That Preserve Rural Character). Many peripheral areas that could later be annexed are developed with densities that are not appropriate to the character of the area.

3. Wholesale Changes

- Undertake joint town-county planning to develop consistent growth management policies that designate preferred growth areas and limit the use and location of large-scale PUDs and new rural towns in unincorporated areas outside town influence areas.
- Create a review process to ensure that new developments are balanced communities providing a full range of services, housing, and employment, rather than isolated subdivisions.
- Adopt an adequate public facilities ordinance (where permitted by state code) that sets criteria for utility expansion and service of outlying developments, and require areas that fail to meet public facility standards to be prioritized in local capital spending plans. Require that infrastructure, such as roads, water and sewer service, and schools, be in place when new development is constructed.

PRACTICE POINTERS

- Analyze whether existing zoning and subdivision provisions allow division of land for residential development without subdivision review. Piecemeal subdividing without review opens the door for development in rural areas that fragments agricultural or natural lands over time.
- The appropriate lot size in agricultural zone districts will vary depending on the region, state, land use patterns, and types of agriculture. Close to urban markets, smaller lots can be appropriate, generally if agricultural zoning and tax exemption requires proof of active agricultural use.
- Some local governments have provided support for land trusts to purchase or accept donation of conservation easements from farmers and ranchers, allowing landowners to realize some value while maintaining agricultural operations.
- Public outreach and education—using meetings, workshops, and development charrettes—are important to implementing these significant changes.

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7 USE CLUSTER DEVELOPMENT TO TRANSITION FROM TOWN TO COUNTRYSIDE

INTRODUCTION

Cluster or conservation development[26]—homes clustered on a portion of a site and the rest of the land preserved as open space—is used to preserve large tracts of open space and agricultural land. Clustering allows landowners and developers to attain the overall allowable density on a site—getting the most development potential out of the site—while preserving a significant amount of it as open space. While clustering can be an effective tool, many rural jurisdictions do not get the results they expect.

If they are near agricultural lands, cluster developments can introduce residents into the area who might not be used to living near farming operations. Complaints about noise, dust, and odors; harassment of livestock by domestic pets; and other issues often follow. Nearby farms might be forced to take expensive mitigation measures or even shut down. Similarly, cluster developments in ecologically sensitive areas can fragment wildlife habitat, introduce invasive species to the detriment of others, and introduce humans and pets into the habitat. For these reasons, cluster developments should be carefully located.

Cluster developments work best where towns transition to true rural areas with active agricultural or livestock operations and large contiguous natural areas. In transition areas, the developed cluster can be adjacent to existing development on the edge of town, with the open space acting as a transition or buffer that separates the development from undeveloped areas. This approach can work as long as extensive additional growth is not expected; otherwise, that additional growth could leapfrog to the other side of the cluster buffer with limited connections to the town.

Photo courtesy of Victoria Ranney

Cluster development can help a rural community transition between town and countryside. Prairie Crossing in Grayslake, Illinois, clustered homes to protect a large swath of prairie. The community includes a station on a rail line that goes to Chicago, a working farm, historic community buildings, and energy-efficient new homes.

26 These terms are nearly interchangeable. For the purpose of this chapter, only *cluster developments* will be used.

Cluster developments are often stand-alone subdivisions in the countryside surrounded by open space, unconnected to towns and requiring residents to drive long distances to get to daily destinations. Learning from this experience, local governments are beginning to direct cluster development to the periphery of existing towns and villages or are limiting their size (e.g., no more than 10 residential lots) to control the impact they have on rural character, agricultural operations, and wildlife habitat. However, even with these strategies, cluster developments can create concentrations of homes in locations so spread out that residents still must drive everywhere.

RESPONSE TO THE PROBLEM

As a first step, small towns and rural counties can adopt zoning and subdivision provisions that allow cluster development only at the periphery of towns. Rural local governments often resist smaller lots (e.g., less than 2 acres) in rural areas, assuming that they will erode rural character. However, when cluster developments are used in appropriate locations—areas between towns and true rural areas—they can provide a smooth transition between town-scaled development and open lands. The homes can be adjacent to already-developed areas (to provide connectivity) or areas with an available mix of uses, infrastructure, and services, while the open space portion of the site provides a buffer between the built-up area and rural land.

To use cluster development effectively, communities need to decide which transition areas are most appropriate for this approach. Offering zoning and/or development incentives can encourage development in those locations. By mapping areas that should be preserved as working lands or natural resource areas and areas that could support future infrastructure expansion, the community can direct development to locations that make sense. Requiring open space preserved through cluster development to abut existing open spaces protects large blocks of land, which better supports agriculture, wildlife habitat, and rural landscapes over the long term.

Some communities mandate standards for cluster development in their ordinances. Others offer voluntary cluster development ordinances with incentives, such as density bonuses. Density bonuses can be flexible, with the number of additional units based on the quality of the design or other community benefits. Clustering offers the most benefits to the community when

Photo courtesy of UGArdener via Flickr.com

Serenbe, a development about 30 miles southwest of Atlanta, Georgia, preserves more than 70 percent of its land as farmland and natural green space. It clusters development into three hamlets that include various housing types, restaurants, live-work spaces, stores, and services.

cluster development locations are chosen based on local and regional priorities for preserving natural habitat and cultural treasures. Communities could measure how well a proposed cluster development meets specific, measurable factors such as:

- The per unit amount of impervious surfaces, road length, or loss of woodlands and other specific resources.
- Orientation of lots around a central green or square or an amenity such as a meadow, a stand of trees, a lake, or another natural feature.
- Preservation of visually prominent areas such as ridges or hilltops and areas along secondary public roads.
- Reducing peak discharges of stormwater runoff to levels that consistent with the discharges from that site before it was developed.
- Capture of 80 percent of the sediments and pollutants in runoff from a one-year storm event.

EXPECTED BENEFITS

- Well-designed and -located cluster development can provide an appropriate transition between town and countryside.
- Cluster development can permit ranchers, farmers, and other landowners to realize development value from their property while protecting large, contiguous blocks of open space for agriculture or to protect sensitive natural areas.
- Local governments can avoid fragmentation of agricultural lands and wildlife habitat when they approve cluster development in preferred locations inside town influence areas.
- Compact, well-designed cluster development requires less paved area for roads and less expansion of water and sewer infrastructure.
- Cluster development can provide environmental and fiscal advantages, such as reducing infrastructure costs and making it cheaper to provide community services (e.g., police and fire protection).

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Require open space, agricultural, and/or ranchland preservation plans on the development site as part of a cluster development proposal.
- Create a comprehensive cluster development policy, summarizing the community's vision for land uses, connectivity to the existing town, and natural resource preservation for new development proposals.
- Provide modest density bonuses to encourage cluster development in town influence areas (e.g., one additional unit for every 10 units permitted under current zoning).
- Allow community septic systems for cluster developments in town influence areas where central sewer is not available.

2. Major Modifications

- In comprehensive plans, designate growth areas that are appropriate locations for cluster development.
- Adopt comprehensive cluster development regulations as an alternative to standard development in all zone districts on the town's edges.
- Adopt future development standards so that clusters in town influence areas can accommodate more development and get infrastructure in the future (e.g., provide easements for water and sewer lines and drainage or designate future connections for rights-of-way to create a connected street network).

3. Wholesale Changes

- Require open space, agricultural, and/or ranchland maintenance and management plans for all cluster development.
- Prohibit cluster development in viable agricultural and sensitive natural areas. Designate prohibited locations in the land use plan and on the zoning map.
- Mandate that permit approvers use specific performance criteria in reviewing and approving cluster subdivision proposals.

PRACTICE POINTERS

- In drafting cluster subdivision provisions, specify preferred locations for open space (e.g., environmentally sensitive areas). Encourage sites that are contiguous with existing development, but allow non-contiguous open space in specific, defined circumstances (e.g., where there are multiple natural features on a site such as streams and steep slopes).
- During the planning phases, ensure the development includes open space, preserves views, and limits impacts on natural areas as required by the local jurisdiction.
- Reach out to landowners and developers to educate them about the process and the benefits of cluster development, especially the potential tax advantages of putting easements in place.

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8 CREATE ANNEXATION POLICIES AND DEVELOPMENT STANDARDS THAT PRESERVE RURAL CHARACTER

INTRODUCTION

Communities often have the most control or influence over development on their edges when they annex those areas. Communities can determine how annexed land can help advance the community vision and planning goals and ensure that public costs of developing annexed areas (including infrastructure capital and operating costs and public services) are balanced with potential tax and other revenues.

Because many rural communities have resource constraints, they might not have the capacity to effectively evaluate all proposed annexations. Few have adopted annexation policies that are coordinated with their comprehensive plans and growth strategies. Nor have most rural towns reached agreements with surrounding or adjacent counties and townships regarding town-level residential and commercial development proposed in surrounding unincorporated areas. Such agreements typically require the proposed development to explore annexation with the adjacent town or village prior to receiving approvals or to agree not to object to future annexation requests by the town. Without evaluation standards, annexation policies, or interjurisdictional agreements, the result is often spread-out or scattershot rural developments that drain local government coffers, strain government service and infrastructure providers, and contradict local comprehensive plans and community goals.

Over time, rural small towns often become financially overwhelmed by providing services to low-density, spread-out developments in surrounding unincorporated areas. This pattern typically occurs when development is allowed on large lots—one unit per 2 or more acres—that use wells and septic systems rather than centralized water treatment. Local governments might find they cannot annex and develop these areas because there are no easements to run water and sewer lines; rights-of-way and street linkages are inadequate to build a grid of town streets; and the scattered, large-lot pattern makes village-scaled developments nearly impossible. As a result, pressure mounts for development that can leapfrog the low-density, spread-out developments.

Image courtesy of Urban Design Associates

Vienna, Maryland, annexed a large parcel of land (outlined in red) in its designated growth area. Two-thirds of the parcel is protected open space that creates a greenbelt and provides buffers for waterways and for farmland. The remaining land can be developed but must connect to the town; one potential concept for this development is illustrated in this plan. Building and street design guidelines, architectural standards, and other guidelines will help the new development fit with Vienna's character. The goal is for the new neighborhood to become a true extension of the town.

One of the most important forces driving annexation is the desire of cities and towns to increase their tax base and revenues. In areas with multiple jurisdictions that are experiencing growth, municipalities also find that if they do not annex aggressively, they might be hemmed in by others' annexations, thus limiting their ability to expand. Municipalities might also believe the only way to ensure that growth in the surrounding region occurs

responsibly is to annex areas to gain control over planning, development, and design decision-making before development occurs.

However, jurisdictions need to be thoughtful about the long-term implications of annexation. In some cases, public expenditures on annexed areas can exceed increased tax revenues from these areas, especially over the long term. This imbalance is often true of lower-density development added near—but not contiguous to—existing communities, which requires road improvements and infrastructure extensions. Even if a development pays the full initial costs of infrastructure improvements—and many states do not allow communities to require such payments—the increased operating, maintenance, and service costs of more dispersed development still can have a major long-term impact on the community's budget (see Chapter 2: Incorporate Fiscal Impact Analysis in Development Reviews).

RESPONSE TO THE PROBLEM

Rural communities can consider the following policies to improve the annexation process and ensure that annexed areas meet the community's development standards:

- Revise local codes to require that annexations be included in the comprehensive planning process.
- Develop intergovernmental processes and agreements—building partnerships between counties and municipalities and between neighboring municipalities—to guide and govern planning and funding for expansion and annexation.
- Establish criteria and a standard review process for potential annexations, including criteria for fiscal impact analyses; required road and infrastructure connections; assessing the need for parks, open space, schools, and other community facilities; and development standards.
- Develop an integrated approach to make sure that annexation is concurrent with adopted zoning and development standards for required infrastructure and community facilities.
- Provide early and frequent opportunities for meaningful citizen participation in annexation and development decisions.

In addition to consideration of development-specific fiscal impacts, annexation review should involve assessment of the community's overall infrastructure capacity—regional transportation, water supply, sewers, schools, parks, fire stations, and other civic facilities. This underlying needs and capacity analysis can help determine what kinds of facilities will be required in areas to be annexed and can be a starting point for negotiations, proffers, or exactions from individual developments (depending on state laws).

Because ad hoc annexation is often driven by local competition for tax revenue, communities could also choose to work with nearby jurisdictions to coordinate their local taxation systems. Revenue sharing among jurisdictions, where allowed by state statute, is one potential solution. Intergovernmental cooperation could also include working together as a coalition to apply for federal and state economic and community development funds. In some states, towns and counties sign intergovernmental agreements to apply town standards in town influence areas. In others, state law gives municipalities the authority to impose their subdivision standards on county subdivisions around their borders. Some local governments draft joint land use plans between towns and counties for areas around towns and adopt joint land use regulations to ensure that new development meets town standards.

Successful use of annexation requires the coordination of partnerships among neighboring local governments, residents, environmental groups, businesses, and developers. These partnerships are frequently an outgrowth of a regional planning process that creates a shared vision of how and where the community should grow and what it should look like in the future (see Chapter 1: Determine Areas for Growth and for Preservation). A shared vision can help rural towns reach agreements with surrounding and adjacent counties to require that town zoning, subdivision standards, and design guidelines be applied to new developments in designated growth areas outside the town's borders. This collaboration could result in development with a better-connected network of roads, wider rights-of-way, and reserved or dedicated connection points to accommodate more compact future development when that development is annexed into the adjacent town. In some areas, towns and counties have reached agreements that require developments in unincorporated areas to include language in deeds or homeowners' association agreements stating that residents agree not to object if the town wants to annex the development in the future.

One strategy to ensure that areas to be annexed are compatible with the existing community is to create a plan for annexation based on the patterns and character of adjacent neighborhoods. To define the desired development type more specifically, communities can adopt a unified development ordinance that brings together subdivision and zoning ordinances and neighborhood development regulations, including street design guidelines and connectivity requirements, development standards that allow a mix of uses and a variety of home and lot sizes, utility and open space guidelines, and protection of sensitive habitat and cultural resources.

EXPECTED BENEFITS

- Local governments can secure community benefits, such as open space and infrastructure contributions, during the annexation process.
- Fiscal impact analyses required as part of a community annexation policy will give local governments a more accurate picture of the true costs and benefits of a proposed development in terms of potential tax revenues and costs of services and facilities.
- Annexation agreements avoid intergovernmental competition for territorial expansion that can lead to over-extension of town boundaries and a scattered, leapfrog development pattern.
- Orderly annexation helps preserve rural resources, such as agriculture, open space, stormwater infiltration, working lands, and natural habitat, and maintain a distinction between "town" and "country."
- Annexation policies help avoid the ad hoc formation of small, incorporated municipalities that can hinder the expansion of existing towns. [27]
- Orderly, planned community expansion accommodates population growth and provides the tax base required to meet the community's objectives.
- Subdivisions and commercial development in town influence areas will be built to standards that make it easier for the properties to accommodate new development or to be annexed into the town in the future.
- Uniform town-county standards in town influence areas help to create predictability regarding community expectations.
- Uniform standards based on joint planning will help produce rational settlement patterns that preserve the ability of the town to expand in a logical fashion, thereby helping to prevent inefficient leapfrog development.
- Better planned, more functional town centers can emerge, serving larger areas more efficiently. In addition, the area can attract a greater, more diverse mix of amenities, stores, services, and job opportunities.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Encourage future annexations to be consistent with the community comprehensive plan (or local equivalent) and require that the comprehensive plan maps and describes future potential areas of annexation.
- Encourage future potential annexation areas mapped in the comprehensive plan to include a preliminary identification of anticipated zoning as well as a preliminary analysis of how municipal services and infrastructure (e.g., water, sanitary sewer, stormwater, transportation, and police and fire) would be funded. This analysis should be based on community service standards and an assessment of existing conditions and revenue capacities in the mapped areas.
- Encourage mapping of potential future annexation areas in the comprehensive plan to identify and evaluate prime agricultural lands, important wildlife habitat, areas of special ecological value or concern, and lands contaminated by past agricultural or industrial activities.
- Establish a code requirement that the transportation element of the community comprehensive plan (or local equivalent) identify a future network of streets connected with the existing town pattern for any potential future annexation areas mapped in the plan. Require that extensions of the existing street network be mapped to meet minimum internal connectivity standards within any annexed areas, as well as external connections with existing and future neighborhoods and developed areas.
- Require annexation proposals to be accompanied by a site plan with enough specificity to allow the local government to undertake a fiscal impact analysis.

27 Towns sometimes incorporate to avoid being subject to taxes imposed by a neighboring jurisdiction to pay for municipal services.

Photo courtesy of USDA Natural Resources Conservation Service

In Sonoma County, California, the Local Agency Formation Commission (LAFCO) reviews and approves proposed annexations. LAFCOs were created by state law to coordinate local government agencies and protect farmland.

- Encourage communities to work together as a coalition to potentially gain an advantage in seeking federal and state economic and community development funding.
- Encourage towns and counties to undertake joint land use planning in town influence areas, to adopt plans designating growth areas, and to establish similar development quality and improvement policies.
- Encourage counties to require new development in town influence areas to meet the town's subdivision ordinance and other development standards (e.g., street design guidelines and connectivity requirements, development standards, utility guidelines, and design guidelines) or to be capable of upgrading to meet such standards upon annexation.

2. Major Modifications

- Adopt detailed fiscal impact analysis requirements for proposed annexations, including criteria for comparing revenues to costs. Include provisions for additional fees and funding to rectify imbalances where costs outweigh revenues. Include provisions for special cases where annexation of lands can be justified based on other community objectives (e.g., protecting open space, recreational lands, or water supplies).
- Establish a minimum contiguity requirement for any proposed annexation area depending on the physical character of the site. A sample requirement might be that at least 25 percent of the circumference of any proposed annexation must be coterminous with the existing incorporated area, subject to exceptions for bodies of water, public parks, or other similar features. An adjunct provision or variation would be to prohibit "flagpole"[28] annexations.
- Develop and adopt joint infrastructure standards (for water, sanitary sewer, stormwater, and streets) for use by a municipality and a surrounding or adjacent county or by multiple municipalities and/or counties to be applied to proposed development in areas that the parties have agreed could eventually be annexed into a municipality. These standards ensure that development in future annexation areas is designed to be consistent with the municipalities' standards.

28 A flagpole annexation is a parcel that is connected to a larger entity, such as a municipality, by a narrow strip of land.

- Require that annexed parcels be zoned in accordance with the adopted comprehensive plan.
- Develop an intergovernmental agreement between one or more municipalities and one or more counties to guide the annexation process in potential annexation or growth areas mapped in the agreement. Include provisions addressing infrastructure standards, funding of infrastructure and services, and approval processes of the affected jurisdictions.
- Build on any joint town-county plans for town influence areas, and adopt uniform zoning and subdivision standards by intergovernmental agreement.

3. Wholesale Changes

- Where allowed by state law, the town and county could form a joint planning commission to undertake development reviews and apply uniform standards in town influence areas.
- Develop an intergovernmental agreement between one or more municipalities and one or more counties providing for development and adoption of a regional and multijurisdictional comprehensive plan. Include provisions for identifying areas of potential future annexation and provisions for zoning, infrastructure, lands of special concern, and street extensions.
- Develop a regional compact or intergovernmental agreement for revenue sharing to reduce or eliminate the pressures to annex land for municipal budget growth. Include a "fix it first" component in the agreement to ensure that existing facilities and infrastructure are not abandoned or allowed to further deteriorate in favor of new development in annexed areas.

PRACTICE POINTERS

- Annexation law and policy are among the most controversial aspects of growth management. Several states are currently legislating on the subject of annexation—changing laws governing municipalities' authority to annex land, establishing or revising criteria for annexations, requiring additional review and approval by adjacent counties and municipalities, or providing for oversight by third parties or agencies. The first step for any municipality is to make sure that existing and proposed local ordinances are consistent with state law.
- Issues related to estimating the costs of extending infrastructure and services into potential annexation areas are difficult to resolve if there are no agreed-upon standards for the timing, placement, and design of facilities and services. Establishing the design and service standards that will be used to estimate the cost of providing facilities and services—ideally in cooperation with other area governments—will help localities make rational and consistent annexation decisions.
- One potential benefit of good annexation policy, especially with multiple jurisdictions involved, is avoiding the leapfrogging of residential and commercial development into rural areas. This benefit will not be realized if the county continues to permit development that is not rural in character. Changes to county zoning and land development codes are an essential component in a rational annexation process.
- To support small towns and rural counties, which typically have limited planning and development staff, state and regional organizations can compile a list of federal funding resources that can be used as incentives, or "carrots," to counter what might be perceived as the "stick" of limitations under revised annexation policies.
- Joint planning efforts typically require significant public involvement and education to ensure that residents of both the town and county, especially those in the town influence area, have a chance to influence decisions. These efforts are important in areas facing growth pressures as well as in older areas with little growth, where the town is declining and the limited growth in that area is moving into surrounding greenfields.

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9 PROTECT AGRICULTURAL AND SENSITIVE NATURAL AREAS

INTRODUCTION

Sensitive natural areas such as wetlands, wildlife habitat, beaches, and steep slopes are important from an environmental perspective, but they also help create the special character of rural areas. They are often important contributors to the local economy, bringing tourism, providing ecosystem services like protecting water quality, and supporting the health of working farmland, forests, and fisheries.

Rural local governments know that working lands, farms, prairies, forests, and rangelands are central to both their heritage and their economic future. Working lands are often at the heart of communities' distinctive rural character—and are often the reason the towns were settled in the first place. Many rural places depend economically on traditional resource industries, such as agriculture, forestry, and mining, and related processing, manufacturing, and trade. In a successful rural economy, a healthy balance can be maintained between the tourist and resource sectors, such as a vineyard that includes a restaurant and a shop, or an orchard with a cider mill and a catalog store operation. Developing supportive policies, land use regulations, and zoning that allow an "agricultural workplace" category can help keep families on the farm and prospering.

RESPONSE TO THE PROBLEM

Jurisdictions are adopting a variety of protective regulations, land use planning policies, land acquisition programs, density transfer programs, and land preservation programs to protect sensitive natural areas and wildlife habitat, as well as to preserve and maintain farmland. The actual or speculative loss in value that occurs when a local government enacts land use regulations to protect land can cause controversy and could spawn legal action. In response, local governments have turned to tools and techniques that provide options for landowners to recoup some of the land value that might be diminished, or perceived to be diminished, by regulations.

Photo courtesy of EPA

Under the zoning code in Kailua-Kona, Hawaii, farms can offer tours of their facilities and sell coffee to the public.

Two relevant programs are purchase of development rights (PDR) and transfer of development rights (TDR). PDR and TDR programs can help gain new support for land protection strategies in rural areas by offering some compensation to affected landowners to offset their potential loss in value. In concept, PDR and TDR programs are simple. A typical rural property identified for possible preservation, which contains high-value natural resource areas or agricultural lands, could be zoned for 1- or 2-acre-lot residential development. To protect the land under a PDR program, the local government would appraise the value of the development rights on a parcel and then purchase a conservation easement that either prohibits development or allows it only at a lower density. Public access to the preserved land might or might not be part of the transaction. Funding for the PDR program might come from general tax revenues, an open space bond issue, or a dedicated funding source such as an earmarked sales tax. The owner typically stays on the property and continues to use the land as he or she did prior to the agreement.

Under a TDR program, the local government classifies property as sensitive land or agriculture through tools such as agricultural zoning or sensitive lands protection regulations, putting much of the land off-limits to development. This action turns such properties into "sending areas." To reduce the financial impact on the sending-area landowner, the local government allows the landowner to sell his or her development rights to a developer who wants to build in a designated growth area—the "receiving area." The developer pays the sending-area landowner for those development rights and then has the right to build more than originally designated. If the TDR program is designed correctly, with a clear understanding of how large the sending and receiving areas should be to create a viable market for development rights, it can be an effective tool to protect large tracts of open space and working farmland. Local government staff must pay attention to the mechanics of the process (e.g., how to determine how many development rights are assigned to a particular property and the documentation of the transfer). Successful TDR programs like those in the New Jersey Pinelands[29] and Montgomery County, Maryland,[30] can be an effective melding of regulations and incentives. In many jurisdictions, this combination could be more appealing than regulations alone.

Other financial tools that help make it possible for landowners to keep farmland in production and avoid the need to sell land include federal, state, and local conservation tax credits, which provide incentives for donating land or conservation easements, and local tax policies, such as use value taxation, which assesses farmland or conservation land at a lower value than it would be worth if sold for development.

Updated zoning can also support job creation that considers social and environmental impacts while preserving working farms and lands, especially smaller farms that can become surrounded by development. Older zoning might not allow commercial, light manufacturing, retail, or related uses in an agricultural zone. A new "agricultural workplace" zone could allow those uses on an owner-occupied farm, allowing economic development activities, home offices, on-farm sales, and agriculture-related industry.

29 New Jersey Highlands Water Protection and Planning Council. "Established TDR Programs in New Jersey." State of New Jersey Department of Agriculture. 2007. http://www.nj.gov/agriculture/sadc/tdr/casestudy/tdrexamplesnj.pdf.

30 Montgomery County, Maryland, Department of Economic Development. "TDR Program Overview." 2006. http://www.montgomerycountymd.gov/content/ded/agservices/pdffiles/tdr_info.pdf.

EXPECTED BENEFITS

- Preserving natural resources contributes to local economies by bringing tourism, hunting, fishing, and other recreational uses.
- Protecting working lands and farms contributes to the economy and rural character while preserving property values.
- Preserved areas tend to cost local governments less than they produce in taxes, due to lower demand for costly town-level services when land remains undeveloped.
- TDR programs that direct development to designated growth (receiving) areas preserve open space, reduce fragmentation of sensitive natural areas, and reduce opposition to agricultural and sensitive lands protection programs.
- TDR receiving areas allow more cost-effective delivery of government-funded infrastructure and services and focus development to attract more consumers, services, and commercial development.
- Preserving agricultural lands and jobs supports agriculture-related economic development that is sustainable over the long term.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Identify and map sensitive natural resources.
- Adopt policies to protect these resources, including limiting capital improvements (such as road improvements or extending water and sewer lines beyond certain developed areas) that might lead to development or degradation. Include opportunities to preserve individual sensitive natural areas in rural towns that connect to larger environmentally sensitive areas and open space in the countryside.
- Seek assistance from state natural resource agencies in development reviews and assessment of impacts on sensitive natural areas. Require larger projects to provide funding that will allow the local government to retain a consulting planner or resource biologist, or charge sufficient application fees to pay for such reviews.

- Establish government service boundaries to encourage in-town development. Demonstrate the cost of service provision outside these boundaries to property owners.
- Work with local land trusts to help secure conservation easements, provide technical assistance, and explain to potential donors the process and the benefits they might realize from pursuing a conservation easement.
- Enact protective regulations such as development setbacks from rivers and a development setback from streams, wetlands, and lakes.
- Seek economic and community development grants. These grants can allow local officials to offer financing incentives and technical assistance to channel commercial and industrial growth to in-town, infill locations and away from sensitive habitat areas, conserving open space while encouraging economic and job growth.
- Fund a PDR program annually out of general fund or other designated revenues. Work with water and drainage districts to use utility and other available fees or taxes for targeted acquisitions (e.g., buying riparian habitat around a lake to protect water quality). Purchase land identified as sensitive natural areas in the comprehensive plan.
- Institute property tax relief or freeze for properties that maintain rural character in the face of development pressure to make sure that surrounding development does not increase land valuation to a point where property owners feel compelled to sell.
- Incorporate tax increment financing (TIF)[31] districts in receiving areas to help fund both the new, compact development in the receiving areas and the activities and services needed in the preserved natural areas.

2. Major Modifications

- Hire staff or part-time consultants with a resource biology background to help assess plans and development proposals.
- Adopt zoning district requirements (e.g., lot sizes) that do not allow significant residential development in sensitive natural areas identified in comprehensive plans.
- Adopt a PDR program with a dedicated funding source (e.g., a large bond issue or an earmarked sales).
- Enact a TDR program. Downzone (reduce permissible density) in sending areas and grant development credits to landowners. Allow new development only in receiving areas through the purchase of development credits.
- Adopt agricultural workplace zoning districts.
- Purchase natural resource areas such as wildlife habitat and wetlands (or purchase development rights) to protect them from future development.
- Adopt a TDR or PDR program to protect designated sensitive natural areas and transfer density to designated growth areas. Make sure the TDR or PDR initiative includes information on tax advantages and other incentives linked to conservation easements and similar strategies.
- Purchase key sites and hold them in a land bank[32] for future development. Develop partnerships with community development corporations, housing authorities (especially those with bonding power), nonprofit development companies, and others to raise funds needed to acquire desired sites.

3. Wholesale Changes

- Develop a resource protection master plan and adopt it as part of the comprehensive plan. Map areas to protect, or conduct surveys to determine boundaries for protection areas.
- Create a permanent source of funding for sensitive area and open space acquisition, such as a sales tax earmark or bond issue. A specific revenue stream, such as a sales tax earmark or user fees, is required to fund a bond option. Another option would be a linked user fee—for example, greens fees from a nearby public golf course—dedicated to funding sensitive area preservation and restoration.
- For places with a PDR program, expand it by fee purchase of sensitive lands and resell the land with conservation restrictions. Such programs tend to need more upfront capital funding and have longer carrying periods but might be more effective in the end because the preserved land can

31 Under tax increment financing, communities can capture the additional property tax revenue generated by the higher property values resulting from investment in a designated area. The new revenue is typically used for infrastructure improvements in the designated area or to retire debt. Most, but not all, states use tax increment financing, and each state has its own requirements and laws.

32 Typically, land banking is used to hold land until a time when the market conditions or other community considerations are favorable for that land to be developed. Land banking can also be used to temporarily hold land out of development until it is feasible to combine it with adjacent parcels for a larger development.

be resold to recoup most of the sales price and will still be protected.

- Adopt a regional TDR program with transfers between rural county sensitive (sending) areas and town development (receiving) areas.
- Explore other development rights for TDR purchases in addition to granting more density in receiving areas, such as allowing developers to buy credits to build larger homes or expand water supply infrastructure.[33]
- Require funding for restoration of degraded habitat on development sites. Use open space funds to restore degraded habitat on protected lands (e.g., stream banks damaged by cattle).

PRACTICE POINTERS

- Work closely with the agricultural community to establish habitat protection programs. Where possible, use incentives such as TDR programs and habitat restoration cost-sharing grants.
- Tie PDR and TDR programs to local comprehensive and open space plans that identify high-value agricultural lands and sensitive areas.
- Balance credits available from TDR sending areas with the absorption capability of the receiving areas. Several communities have struggled when the sending areas are too large and too many development credit sellers are chasing too few buyers, which reduces the value of development credits.
- Make sure TDR receiving areas are designed to receive increased development, which should match the locally preferred intensity and height.

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33 Pitkin County, Colorado, for example, allows house sizes of more than 5,750 square feet only if the homeowner purchases development credits from sending-area landowners.

10 PLAN AND ENCOURAGE RURAL COMMERCIAL DEVELOPMENT

INTRODUCTION

Like all economically sustainable places, rural communities need a strong commercial base. A commercial zoning designation typically allows offices, stores, services, restaurants, medical facilities, and similar activities, but not residences. Newer zoning codes—based on patterns long established in nearly every town in America—incorporate a variety of commercial and residential types and uses into mixed-use zoning. A mix of uses reduces driving distances and makes it easier for people to walk or bike to their daily destinations because homes, workplaces, stores, schools, and services are closer together. Directing commercial development to existing towns and villages helps encourage residential growth in town and reduces the likelihood of scattered businesses in rural areas that encourage more spread-out development and fragmented land. Encouraging commercial development in towns helps to strengthen downtowns and solidify tax bases so the towns have adequate revenues to support community services such as schools, roads, and emergency services.

While a guiding principle for towns and counties should be to focus commercial development in existing centers, there are legitimate reasons to allow commercial development in undeveloped areas outside municipalities. Common-sense approaches should apply, and towns need to make sure that existing zoning does not impede compatible new operations and activities.

Emerging strategies that could help the traditional resource economy adapt to the changing global market and sustain itself over the long term include more sustainable agriculture practices; production and distribution of renewable energy, such as wind, solar, biomass, methane from livestock, and geothermal; and green jobs in former rural manufacturing plants converted to produce, distribute, install, and maintain green energy facilities and distribution networks. Most of these strategies will probably require changes to existing zoning and development codes.

Photo courtesy of EPA

Reuse of former industrial and commercial sites lets rural communities use their existing resources, preserve their heritage, and promote new economic activity. For example, this former mill in Front Royal, Virginia, is now a restaurant.

RESPONSE TO THE PROBLEM

Rural local governments are managing and encouraging commercial development in a variety of ways:

- Some local plans call for most commercial development to be located in incorporated municipalities, with a few exceptions.
- Some local governments sign formal intergovernmental agreements that implement these policies through zoning district regulations that do not allow commercial growth in outlying areas.
- Other jurisdictions that allow some commercial development outside towns have adopted design standards to help ensure that the new development respects rural character.
- Rural localities that have experienced commercial strip

development along entry corridors that lead into town centers from the surrounding areas are using corridor redevelopment strategies to convert aging shopping strips and underused parking lots into walkable, mixed-use destinations.[34]

Careful planning and close cooperation between towns and counties can help ensure that commercial development in rural areas strengthens the local economy while protecting the environment and the rural quality of life. This cooperation could include interjurisdictional agreements that articulate the value of emerging green industries. For example, entrepreneurs seeking to site wind farms and solar installations in rural areas are also considering rural locations for the related manufacturing and maintenance facilities, potentially providing new high-paying jobs.

Incentives can help direct commercial and industrial development to appropriate locations, like existing Main Streets or unused industrial, warehouse, or brownfield properties. Businesses might be more interested in reusing vacant properties when at least one property owner in the area has successfully converted a building back to productive use. Localities should make sure that in-town zoning allows, where feasible, the uses and services typically found in strip centers.

Many rural communities identify appropriate locations for expanded commercial or mixed-use development, including:

- Downtowns and adjacent commercial areas.
- Small commercial or mixed-use districts in residential neighborhoods near downtown.
- Commercial corridors, which have many buildings and aging sites that are underused or underperforming as retail or commercial businesses.
- Traditional industrial areas, agricultural service areas (often near railroads), and warehouse districts.

Downtowns and surrounding commercial districts usually have a variety of sites that can provide development opportunities. Commercial properties, including light-industrial or warehouse buildings, can be converted to mixed-use development with ground-floor retail or offices. Even small towns can have large industrial parcels ideal for transformation into commercial, retail, or mixed-use districts. A financial feasibility analysis identifying appropriate potential uses can help the development community to understand the opportunities.

Small-town commercial corridors can suffer from aging, underused properties as well as competition from newer, outlying retail centers. They typically have greyfield (e.g., underused parking lots or shopping centers) and brownfield properties (e.g., former gas stations, dry cleaners, or industrial sites that might be contaminated), often at key intersections and within walking distance of residential neighborhoods.

Localities and business groups can map underused sites along major commercial corridors and evaluate their potential. Reusing these retail and service sites has several benefits:

- They are often large enough to be viable, mixed-use developments.
- Existing retail zoning might already allow commercial, residential, and mixed-use development.
- The connection to adjacent residential neighborhoods is often minimal, and new mixed-use development will be more compatible than existing commercial uses, helping to build neighborhood support for more compact development.
- Many older shopping centers were built at intersections, which can make redevelopment projects targets for enhanced or extended transit service or promising locations for future transit service, if none is currently in place.

Corridor redevelopment plans can be developed through a charrette, with government staff, residents, business owners, and elected officials creating a vision for the corridor and design concepts for specific sites. This approach can expedite redevelopment by providing general direction to potential developers, even before any longer-term transportation improvements are completed. These redevelopment plans could be used as guidance in a PUD process (see Chapter 3: Reform Rural Planned Unit Developments) or as design guidelines for a mixed-use project under retail zoning that allows residential uses. These corridors could also be receiving areas for TDR lands (see Chapter 9: Protect Agricultural and Sensitive Natural Areas). Local governments can assist in these types of projects by expediting design and review processes and by providing infrastructure financing for streetscape and utility upgrades.

34 ICF International and Freedman Tung Sasaki. *Restructuring the Commercial Strip: A Practical Guide for Planning the Revitalization of Deteriorating Strip Corridors.* EPA. 2010. http://www.epa.gov/smartgrowth/corridor_guide.htm.

Since residents of nearby neighborhoods sometimes object to redevelopment of corridors and downtown commercial districts, the town could adopt performance standards to measure and control noise, parking, lighting, and other neighborhood concerns. Similarly, the town could develop performance standards to encourage home businesses while minimizing any impacts. These standards should focus on the perceived impacts or concerns, like traffic or parking, rather than specific occupations or uses, to avoid the subtle bias that can sometimes arise. The community also needs a mechanism to determine when a home occupation or craft, such as tailor or woodworker, becomes a cottage industry. The same is true for farm-based businesses; a new "agricultural workplace" zone could allow commercial, light manufacturing, retail, or related uses on an owner-occupied farm, allowing home offices, on-farm sales, and agriculture-related industry (see Chapter 9: Protect Agricultural and Sensitive Natural Areas).

EXPECTED BENEFITS

- Directing commercial growth to towns and along corridors helps reduce scattered development in unincorporated rural areas.
- Active commercial centers and downtowns create a strong sense of community and bring shops, services, and employment.
- Development increases the tax base to support municipal services.
- Residents can walk or bike to stores and services, which could improve their health, save them money, and reduce greenhouse gas emissions and other air pollution.
- Redevelopment of aging corridors that do not fit with the town's desired character also helps avoid commercial development outside towns that detracts from rural character and scenic views.
- Capitalizing on public and private investment in renewable energy facilities in rural areas can generate jobs and tax revenues.

Photo courtesy of Jim Charlier

Encouraging commercial development, including small businesses, in the downtown strengthens the community and brings new activity to Main Street, as seen in Wells, Maine.

STEPS TO IMPLEMENTATION

1. Modest Adjustments

- Adopt a policy in county comprehensive plans to locate most commercial development in incorporated towns unless that development must be in an outlying location due to its use (e.g., processing agricultural products).
- Allow commercial development only in town influence areas or established unincorporated hamlets and crossroads villages with good connections to existing development, not in more remote locations.
- Direct state and local public works spending in ways that support and encourage activity in existing commercial areas in incorporated towns and discourage it elsewhere.
- If there must be commercial development in outlying areas, cluster it to create nodes instead of stringing it along the highway.
- Assess the support and customer base for additional retail development and match the zoning to the likely size of eventual build-out to help direct development toward preferred areas.

- Encourage new industrial activity in town influence areas by marketing sites adjoining rail stations and other locations where the community wants development. If the community is offering development incentives, it could give priority to projects that locate on these sites.

2. Major Modifications

- Prohibit rural commercial development in many county zone districts. Allow it only in service areas and locations designated in the comprehensive plan.
- Conduct a study of all available parking in downtown and commercial districts, and implement a parking management plan or "park once" district to encourage shared parking and to use parking more efficiently. When parking is developed at appropriate levels, uses can be more compact, and the community can add design amenities like streetscaping, which makes business locations more attractive.
- Conduct a planning study along an aging commercial corridor to identify key redevelopment sites and priority transportation improvements. Adopt any required zoning amendments or an overlay zoning code to allow and encourage redevelopment.
- Conduct a commercial market analysis for the downtown to identify commercial opportunities and needs.

3. Wholesale Changes

- Sign an intergovernmental agreement with towns in the region to share tax revenues from unincorporated commercial development.
- Assess road, safety, infrastructure, and other impact fees on rural commercial development to reflect the full cost of services and facilities needed for development.
- Assess the potential for renewable and alternative energy production and associated manufacturing and services. Determine appropriate locations, siting requirements, and regulations to encourage green industry and jobs.
- Identify any publicly owned land or buildings that are appropriate for commercial, industrial, or mixed-use development. Conduct a planning workshop to identify preferred uses and to spur redevelopment. Coordinate with local and regional business and industry organizations to develop a marketing strategy to recruit businesses.
- Consider creating a TIF district to encourage and fund downtown commercial development.
- Allow commercial development in outlying areas by special use permit only after requiring the developer to demonstrate the need for that service in that area. Adopt site and building design standards to ensure that any commercial development is in keeping with rural character.

PRACTICE POINTERS

- Joint town-county planning for commercial development in rural areas is usually essential to a successful implementation program.
- Encourage staff to investigate potential technical assistance and funding opportunities to reuse vacant properties and formerly contaminated sites.
- Many state departments of transportation and regional planning agencies have programs and grants to support revitalization of Main Streets and redevelopment of commercial corridors as long as vehicle movement and safety are also addressed.

EXAMPLES AND REFERENCES

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