

Comparing Visual and Cognitive Perceptions of Rural Character
in Rural Towns and Unincorporated Settlements

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Abstract

This thesis investigates similarities and differences between how residents of small, incorporated rural towns and residents of unincorporated rural communities define and identify rural character. Using a variation of Conceptual Content Cognitive Mapping and a photo-questionnaire, the responses of residents from different types of rural communities in Idaho are used to develop a model to explain how residential preferences for scale and context influence rural character and informal community design. The findings suggest that residents of unincorporated and incorporated rural communities use similar concepts when defining rural character, but identify it differently in the landscape and built environment. The differences suggest that scale and context appropriateness in the presence of a dominant traditional land use influences the visual perception of rural character, despite the use of common tangible and intangible concepts when defining it.

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Table of Contents

Authorization to Submit Thesis	ii
Abstract.....	iii
Acknowledgements.....	iv
List of Figures	vii
List of Tables	viii
Chapter 1 Why Rural Character is Important.....	1
Introduction	1
Vectors of Rural Character Change	1
Rural Property Rights.....	7
Demographic Change	10
Parcelization of Land.....	13
Chapter 2 Critical Theory	19
Introduction	19
Residential Land Conversion	21
Rural Planning Capacity.....	23
Rural Gentrification	26
Chapter 3 Methodology.....	34
Introduction	34
Sampling Procedures.....	34
Measurement Instruments.....	42
Data Analysis	49
Chapter 4 Results	53
Introduction	53
3CM Results.....	53
Photo-Questionnaire Results	58
Chapter 5 Discussion.....	73
Introduction	73
Density Zoning	73
Property Rights	80
Triangulating Rural Character	82

Scale and Context in Rural Character	87
Chapter 6 Conclusions and Implications.....	90
Conclusion	90
Modeling Unincorporated Rural Communities.....	91
Design Considerations	96
Designing with Rural Community Archetypes	106
Further Research	107
Works Cited	109
Appendix A	116
Appendix B	194

List of Figures

Figure 3.1 An example of new development in rural communities.....	41
Figure 4.1 Residential #24 Total Mean = 4.44	59
Figure 4.2 Residential #26 Total Mean = 2.17	59
Figure 4.3 Residential # 10 Total Mean = 2.36	61
Figure 4.4 Residential #23 Total Mean = 2.0	61
Figure 4.5 Residential #27 Total Mean = 4.36	64
Figure 4.6 Residential #14 Total Mean = 3.5	64
Figure 4.7 Business #33 Total Mean = 2.42	67
Figure 4.8 Business #30 Total Mean = 4.5	67
Figure 4.9 Aerial #50 Total Mean = 2.78.....	69
Figure 4.10 Aerial #46 Total Mean = 3.11	69
Figure 4.11 Aerial #52 Total Mean = 3.36.....	72
Figure 4.12 Aerial #45 Total Mean = 4.11	72
Figure 5.1 Aerial #56 Total Mean of 4.64.....	78
Figure 5.2 Aerial #67 Total Mean 2.1	78
Figure 5.3 Residential #18 Total Mean 1.92	79
Figure 5.4 Residential #24 Total Mean 4.44	79
Figure 6.1 Scale and Context Punnett Square.....	92

List of Tables

Table 3.1 Example 3CM Map from the long-term rural resident group	46
Table 4.1 Meta-Themes and Themes generated during the 3CM process.....	53
Table 4.2 The percentage of individuals from each group including at least one concept in each theme.....	56
Table 4.3 The average number of concepts that participants in each group listed for each theme.....	57
Table 4.4 Factors for the Residential Photo Set	60
Table 4.5 Group Means for Residential Factor Analysis - α indicates difference at 0.05 level	63
Table 4.6 Factor Analysis for Commercial Photo Set.....	66
Table 4.7 Group Means for Commercial Factor Analysis - α indicates difference at 0.05 level	68
Table 4.8 Aerial Photo Set Factor Analysis.....	70
Table 4.9 Group Means for Aerial Photo Sets - α indicates difference at 0.05 level	71

Chapter 1 Why Rural Character is Important

Introduction

“Ultimately, the community’s own definition of rural character is the single and most important part of its preservation. Each community must decide what its rural character is and, subsequently, what should be preserved and how development should take place.”

-Dewey Thorbeck (in Rural Design: A New Design Discipline, 2012)

Rural design is not a new idea. Until recently, however, it has not received the professional following of its glamorous sibling, urban design. At first glance, it may seem that urban and rural design are just two sides of the same coin, but this is a flawed assumption. Rural design can be as complex and exciting as urban design and in some ways more so of the inherent capacity for both urban and rural interventions resulting from the range of rural community types – specifically incorporated rural towns and unincorporated rural settlement. The statement by Thorbeck is ultimately true, but it may lead those new to rural design to assume that all rural communities have independent will or the tools to pursue it when defining rural character. This assumption has led to potential important misunderstandings about the generalizability of rural character. There is a clear need to determine if residents of rural communities with different organizational structures have different ideas of rural character.

Vectors of Rural Character Change

In planning and design, the concept of rural character, at least in Idaho, has become a clichéd term. It appears in many municipal and county guiding documents as something to strive for and protect, but is never defined in a manner that can be

quickly and universally recognized. It is a term of art, which makes it both very useful and very useless depending on individual context and need. It is a product of localized interactions of people, economy, and the landscape, but despite the importance of locale and the qualitative nature of describing rural character, there is general consensus between both urban and rural residents that rural character is important and should be preserved (Johnston, Swallow, Tyrrell, & Bauer, 2003; Lokocz, Ryan, & Sadler, 2011; Ryan, 2006). This makes it an attractive tool for planners and designers, but the subjective nature of defining it can undermine the intention behind using it in planning and design interventions – especially at the landscape or regional scale, as found with many county guiding documents. A better understanding of the general factors that contribute to rural character is necessary if it is meant to be an effective tool for protecting rural places through planning policy and design, but this may not be enough. Rural settlements are unique. Each has its own distinct character that developed over time - influenced by interactions of human dimensions and natural systems. Some were platted, but many were informally organized. Even still, some incorporated into towns and cities, while many opted to remain unincorporated.

The decision to incorporate introduces structural variables that influence the rural character of a town. Once a municipality forms, it can begin planning for itself and collecting taxes and fees to fund local improvement projects. It can create ordinances that codify the local culture and place parameters on the built environment so that it supports the consensual visual quality of the town. It can make decisions about the provision of amenities and act to realize them – rather

than leaving it to chance or opportunity. Incorporation gives a rural community the opportunity for a level of free will that allows it to act with intention on its own behalf. It can begin to change itself or it can work to slow change. It can exercise powerful regulatory influence on the variables that affect local rural character. This is not the case for rural settlements that do not pursue incorporation.

Unincorporated rural communities can be thought of as “wild” in a sense. They exist under the regulatory umbrella of county governments, which often use traditional zoning tools to protect the accepted spatial characteristics of “rural character”, but rarely address local cultural inputs to it. The primary tool is density zoning, which sets minimum lot sizes according to the dominant land use in a zoning district. The general consensus is that density zoning is a good tool for preserving quality of life and character in rural places and that it is an acceptable compromise with private property rights. Under this policy paradigm, however, rural communities are seen, legally, as not much more than collections of private property. At a place level, however, they are bound by social mores and local culture derived from generations of shared values and experiences in the landscape. Even though they have rich local heritage and culture, they have very few, if any, legal tools to protect themselves from the influences of land use change prompted by adjacent landowners. They cannot regulate the variables that influence their own rural character.

Since unincorporated and incorporated rural communities are inherently different in their ability to regulate the variables that influence rural character, do they have different perceptions of rural character? Does the ability to self-govern

somehow change how rural residents define or identify rural character? The research discussed in this thesis attempts to answer this question.

Defining rural character is like many other design and planning challenges. It is context and scale sensitive. It is both tangible and conceptual while also being both visual and experiential. It is a moving target. This characteristic allows it to be deeply personal, but also communal. Here in lies the problem. The same characteristic that allows people to translate and tailor rural character as an element of place-making also allows it to be manipulated and edited out of cultural context. It can be quickly and easily undermined. Support for this idea can be seen in research done by Johnston et al. (2003) who found that rural character is ascribed to different aspects of a place depending on who is describing the character. Those living in a rural community describe rural character as a function of the places in and on which they live and develop their rural social lives. This idea of “rural as home” contrasts with the descriptions of rural character by those looking at rural places from outside of communities. In these cases, rural character is described as a function of the natural landscape rather than the cultural fabric (Johnston et al., 2003). This facilitates a miscommunication that may be responsible for negative attitudes towards tourism in rural places since it could be read as outsiders failing to reference local context in their definition of the place. This is effectively the dissociation of local contextual meaning from place. A natural extension of this phenomenon is the assumption that many rural communities, from the perspective of outsiders, are only collections of structures in the landscape rather than a functioning rural community. This is important because it suggests that in some cases only the people living in

rural communities are able to recognize them. If this is indeed the case, it might explain why some urban in-migrants prefer new subdivision developments or custom homes on large rural lots to living in established rural communities. They may not be able to recognize that there is already a community there because they reject sociocultural contextual clues necessary to recognize it beyond the built environment. If someone cannot easily access information that prompts them to recognize a rural community, how can they be expected to experience it?

Without social context, people looking to relocate to rural places may fail to realize that there is more to the rural experience than the landscape. This can be seen in rural subdivisions that attempt to stylize rural character so that it is an attractive compromise between a traditional rural experience and amenity laden urban living. They are often located near impressive natural amenities and come stocked with amenities to facilitate a sense of community, like sidewalks, well-maintained parks, and community club houses. In exchange, they use legal tools to weave private and community property together and visually unify the community to protect it from its own residence at the expense of private property rights. This is starkly different from how traditional rural communities function. What homebuyers often fail to realize is that by purchasing in a rural subdivision, they are supporting a market for land conversion that has the potential to degrade the very opportunities to have the rural experiences they are buying (Hiss, 2010). Rural residential growth, if not managed for its negative consequences, fragments important habitats and landscapes, degrades visual quality, and disrupts the efficient ecological and economic use of the land (Arendt, 1994; Steel, 1999). Additionally, without policy

and design oversight, many places inadvertently encourage spatial segregation by race (Lichter, Parisi, Taquino, & Grice, 2010), socioeconomic status (Gosnell & Abrams, 2009), and class (Phillips, 1993).

Subdivision and Homeowner's Associations

The scalability of the spatial segregation phenomenon becomes more impressive at the neighborhood level where it is not uncommon for homeowners or tenants to collect into associations for the purpose of protecting private interests in a communal way through covenants, conditions, and restrictions (CC&R). These agreements are often developed out of the desire to strengthen community property rights beyond what is described at the local governmental level. CC&Rs are often multi-purpose, where in they are overt agreements to place the value of neighbors' property above an individual's property rights by outlining the parameters of acceptable exercise of them in support of a common, desirable culture. For instance, common restrictions place limits on the number of pets a homeowner can have or where vegetable gardens can be located on a parcel. Even the color of one's home is often subject to community approval. The adage "good fences make good neighbors" comes to mind, but this perspective ignores the nuances used to justify such agreements, which are not part of traditional rural community culture.

CC&Rs are interesting in that they are attempts, often successful, to circumvent private property rights protected at every level of government by creating what is effectively more government, albeit private government. The processes used to create and fund the homeowner's associations (HOA) that use them are virtually indistinguishable from the democratic process of electing a representative

government, creating laws, and paying taxes to support it. They operate, in a real sense, as municipalities. Within city jurisdictions, this is not necessarily alarming because cities are patchworks of different levels of property rights agreements already. In unincorporated lands, however, HOA governed subdivisions obviate a widening gap in power and influence between rural settlements and rural subdivisions. This gap is challenging traditional notions of rural character by forcing county governments into a sort of policy check-mate where highly organized rural subdivisions, which generate revenue for the county, lobby for urban-type amenities and policy changes are good for them, but may disenfranchise traditional rural residents. In effect, the constituents who supported policy regimes meant to weaken local government as a way to expand their property rights find themselves with no regulatory protections from encroaching developments marketing a different kind of rural character. Research by Theobald et al. (1996) describes this phenomenon occurring in Colorado where politically organized rural subdivisions have lobbied county governments to provide services they feel they deserve in exchange for taxes, but place financial burdens on traditional rural residents.

Rural Property Rights

Attempts to minimize the negative impacts of rural subdivision development are often met with resistance from local governments with strong directives from constituents to expand property rights. At a county level, these are often the same people affected by encroaching development. However, since rural development happens slowly and remotely, only a few rural residents are affected at a time. This de facto divide and conquer strategy keeps grassroots efforts to influence rural

residential development focused locally rather than on the systemic problem. Very few people ever see the big picture. Planners often do, but their hands are tied because they have very little power or influence over the interpretation or implementation of policy.

Unlike rural subdivisions, Idaho's traditional rural communities do not have local policy control or the ability to levy fees that fund local public improvement projects. These powers are reserved to the county governments, which generally honor the wishes of rural residents to provide policies governing unincorporated lands that place the goal of preserving and expanding private property rights as a priority. The result has been a policy regime that strongly favors property rights and clearly defines the roles of urban and rural areas in terms of human dimensions. Simply put, rural policies tend to support the expansion of individual property rights, while urban policies tend to support the protection of individual property rights as a function of defining community property rights. With its stronghold of political influence, by way of the large population share of most of Idaho's counties, Idaho's rural culture has worked to clearly demarcate this line, which is evident in the disparate amount of investment of public funds in the public/private property interfaces seen in urban and rural communities. Curbs, gutters, sidewalks, street trees, and the maintenance of them are examples of how urban governments and HOAs invest in the spaces between private property lines and public right-of-ways. There is no equivalent for rural communities aside from basic maintenance of right-of-ways and easements.

In terms of rural quality of life, this line in the sand is seen as an important value by property owners in unincorporated places and it translates to an idea akin to favoring small government through paying less in taxes and preferring limited government intervention through selecting a residential location that is not subject to ordinances that attempt to build communities through investment in and creation of community property. In exchange, unincorporated rural residents take on the responsibility of providing many of their own services – specifically water and wastewater treatment, but also informal community development.

However, this cultural and political directive means that ordinances are not written to preserve communities – rather, they are written to preserve the idea (or option) of community as an extension of private property rights, which places a tremendous amount of control in the hands of private citizens. Thusly, the burden of community building and place-making is placed squarely on the shoulders of private property owners who often subscribe to the idea that what is urban is definitively not rural, such as with large amounts of community property. This results in a visual shift away from spatially organizing elements in the public realm toward a less obvious and more place-based reliance on the continuity of rural character manifestations between private landowners.

While rural subdivisions often reference development agreements with the county to improve community property, like right-of-ways and parks, during phased construction and use fees collected by HOAs to fund projects, traditional, unincorporated rural communities developed through processes that may not have included such agreements. In this respect, they are an entirely different species.

Traditional rural communities do not have direct access to tax dollars, the philosophical equivalent to HOA fees, needed to fund local community property improvements. Even if funding was available and local leadership had the authority and inclination to commission community property projects, this type of improvement is not necessarily appropriate in traditional rural communities. It is rare to find curbs, gutters, sidewalks, parks, or manicured trails in unincorporated rural communities, but these amenities are exceedingly present in rural subdivisions. Instead, opportunities for interventions in the public realm are often proposed as supplements to infrastructure improvements, such as when a highway district widens or upgrades transportation corridors through a community. The results are generic interventions, which often do not have the benefit of much local design input. In terms of public realm investments, rural communities seem to be more disconnected from decisions about how public infrastructures interfaces with private property than in urban places or in rural subdivisions. This is not to suggest that traditional rural communities are not as interested as residents of rural subdivisions. Instead, it is meant to demonstrate that there are potential capacity and motivation differences.

Demographic Change

Rural subdivisions and the destabilization of social, economic, and political mechanisms are far from the only vectors of change facing rural communities. Demographic change is also introducing complicated variables into communities that have persisted relatively unchanged and racially homogeneous for generations, but Idaho's strong agricultural economy, aging rural population, and rural population decline reveal that decades of slow demographic change have created opportunities

for non-white populations to take on a larger share of preserving Idaho's rural heritage.

Ethnic and racial diversity is increasing in rural communities as a national trend (Kirschner, Berry, & Glasgow, 2006). In Idaho, Hispanics hold a steadily growing share of the population, currently at 11%, up from just 5% in 1990 (Dearien & Salant, 2010). They account for 5% in rural areas. In fact, if it were not for rural in migration of Hispanic populations, some Idaho counties would be losing population (Dearien & Salant, 2010). Idaho's Hispanic rural residents account for 63% of the growth in Idaho's rural population between 2000 and 2009 (Dearien & Salant, 2010). Further, Idaho's Hispanic rural population tends to be younger than the non-Hispanic rural populations because it includes a majority of young adults and children (Dearien & Salant, 2010). Traditionally, younger aged demographics have different quality-of-life expectations and needs for amenities that are not readily found or easily provided for in unincorporated rural communities, such as entertainment, technology support, shopping, child care, youth sports, and restaurants. This disparity can place established and new rural populations at odds with one another because not only are there differences in age and family structure, there are also differences in the services required by each demographic. White non-Hispanic rural populations are trending toward an increase in median age, which is influencing the nature of rural services toward healthcare, while Hispanic rural populations are seeking services that improve the quality of life for children and young adults. Research by Glendenning et al. (2003) shows that while the quality of life for children is very highly desirable in rural communities, teens and young adults report

that a lack of certain urban type amenities (public transportation and venues to socialize, particularly) make rural communities undesirable to them.

Additionally, Hispanic families often have an extended structure, which can include not only the traditional nucleus of parents and children, but also grandparents, aunts, uncles, cousins, and even unrelated friends). This is not a new idea, generally, in rural areas, but it represents a shift in Idaho from a nuclear rural family to an extended rural family structure, which brings with it additional needs for community and social networks, public and semipublic space, and new ways of interfacing in the public realm. This is, presently, unaligned with the philosophy of rural policies that may use the demand for community property and youth-oriented amenities as an indicator of an urban, rather than rural, culture. Additionally, Hispanic populations moving into new destinations, such as rural communities, are more likely to experience spatial segregation than they are when moving into places with established Hispanic populations (Lichter et al., 2010). The drivers for spatial segregation in rural areas are not well understood, but research indicates that the degree to which segregation occurs is likely to be an indicator of racial tension in the area (Lichter et al., 2010). The implications of spatial segregation on the organization and informal design of rural settlements have not been well studied, but research indicates that segregation increases as minority presence in rural places increases and that the phenomenon of racially selective annexation is influencing the shape of changing city jurisdictional boundaries (Lichter, Parisi, Grice, & Taquino, 2007).

The primary driver for immigration into rural areas, particularly in the Northwest is a combination of demography and economics. The strong agriculture industry and need for low-skill labor is attracting, young single immigrants to the region. As the personal finances stabilize many of them will start families in the rural communities where they are employed. In Idaho, poverty in rural communities is very high and access to education is very low. Increasing minority populations in rural areas are expected to maintain this trend because minority populations tend to experience higher rates of poverty (USDA Economic Research Service, 2014). Further, there is evidence that Hispanic populations moving into rural communities can be subjected to spatial segregation (Lichter et al., 2010). This is likely to have dramatic influences on the spatial influences of rural character.

Parcelization of Land

In addition to demographic change, the morphology of rural settlements is being influenced by the preferences of new residents. Parcelization of rural lands is not a new phenomenon. Division of large tracts of land by testamentary provision and Law of Descent occur regularly as people inherit land. The number of divisions and minimum lot sizes allowed per transaction varies from jurisdiction to jurisdiction, but this type of parcelization is considered to be more or less natural. It is often exempt from the requirements of county subdivision ordinances. However, there are many other kinds of divisions that contribute to parcelization in much less expected and otherwise orderly ways, and thusly require more oversight to make sure there are no adverse an unexpected consequences. Administrative land divisions often do not require public hearings because they are considered to be relatively low impact.

These are often decided on a case-by-case basis and approval of applications is often left to the discretion of planners. Subdivisions, on the other hand, are subject to a lengthy and comprehensive public application process because they result in the creation of many new parcels, which requires consideration of conveyances for infrastructure and other services that must be tracked by the local government. For these reasons, subdivisions are considered to be the most notable vector of parcelization and land-use change in rural lands. Between 1970 and 2000, the trend of low-density exurban development resulted in the conversion of fifteen times the area of higher density urbanized development (Brown, Johnson, Loveland, & Theobald, 2005) making it, by some estimations, the dominant mode of land development in the United States (Nelson & Duncan, 1995). This is no coincidence. The supply of rural land available for development is the direct result of actions taken by developers and land speculators to bring it into the marketplace (Esparza & Carruthers, 2000). The motivation for creating a supply of developable rural land stems from the trend for increasing population growth in the West and the less complex policy regimes governing the development of rural lands relative to land in metropolitan areas (Esparza & Carruthers, 2000; Nelson & Dueker, 1990; Nelson & Duncan, 1995).

Idaho's local land-use planning act requires that cities and counties develop agreements for how areas of city impact (ACI) are to be managed for growth and development. Since the land within the ACI is slated for eventual annexation by a city, many of these agreements state that development standards will follow city guidelines for the purpose of easing the eventual interface of city infrastructure with

the privately developed infrastructure of a rural subdivision. However, this creates complications related to representation for residents of the ACI on city councils and boards. Effectively, residents of the ACI live outside of the city, but are often required to submit applications for land use changes, including conditional use permits and variances, to the city rather than the County. In most cases, if the city denies an application, the resident can appeal to the County. However, even though the County has final jurisdictional authority, decision-makers may find themselves in a difficult position wherein they are walking the line between rural and urban philosophies on private property rights. Philosophically, urban areas tend toward property rights protection - meaning that property rights are considered to be a tool to protect property, particularly value, from externalities placed on it by the exercise of property rights of adjacent property owners. In rural areas, the culture is to expand property rights, wherein property owners are given wide berths by county governments in the exercise of them. This may be a phenomenon of parcel size since urban areas often have much higher population densities per acre, which means that each parcel has the potential to be impacted by uses on many more adjacent properties than those in rural areas. Additionally, rural populations are much more self-sufficient and independent in terms of providing services for themselves. This includes private wells and septic systems, which are almost exclusively located on the same parcel as the homestead. It may seem counterintuitive to allow more potential impact from neighboring parcels when there is the risk of degrading drinking water or compromising the ability of septic systems to treat waste, but this highlights the important distinctions between the roles of cities

and counties. In cities, residential lots are often too small to safely allow septic system drain fields and private drinking water wells on the same property. As a matter of police power, these services are provided to maintain the health, safety, and welfare of the general public. This allows for very high residential density, which facilitates efficient use of public transportation and utility infrastructure. This is not the case for property owners in rural areas. The spatial arrangement of homesteads is often such that it is inefficient to provide the same kinds of services found in urban areas. The cost of building infrastructure for public water and sewer, utilities, and public transportation are simply too great because they are divided among a much smaller population spread over a larger area.

Density zoning is the premiere tool used for protecting rural character in Idaho. Density, through the regulation of minimum lot size, is one of the indicators of where along the urban to rural transect a particular zoning district is likely to be seen. For instance, an area zoned for agricultural land uses may have a minimum lot size of 20 acres and allows only one residential unit per parcel, while a single family residential zone may have a 0.25 acre minimum lot size that allows one primary residence along with one accessory residence, like a garage apartment or mother-in-law's flat.

The premise for using lot size is simple - large lot sizes spread people out, which limits human impact and slows landscape change, while small lot sizes aggregate them together, which intensifies human impacts and speeds landscape change. For generations, this strategy worked and people self-selected based on their needs for access to goods, services, housing, transportation, employment, and

amenities. People who needed or wanted high access sought out urban centers which depended up on high population density to sustain amenities like public transit and restaurants, while those who had preferences for more privacy or self-reliance found ways to stay in rural lands. These choices had implications that permeated all areas of life. Family size, profession, health, education, quality of life, and housing are all points upon which urban and rural cultures began to diverge as a result of amenity preferences. This is no longer the trend. Communication and interaction through television, radio, personal mobile devices, internet, educational centers, and readily available transportation are threading the less esoteric aspects of urban and rural cultures back together independent of landscape influence. We do not yet know the outcomes of this reintegration, but there are clues to be found as cultural mixing occurs in the space between urban and rural communities; particularly in the evolving aesthetic of new rural residential developments, which often attempt to create private governments to reconcile the desire for and availability of urban-type amenities which exert powerful influences on rural character.

The vectors of rural change are not specific to any one type of rural community, but the disparate capacities to address them mean that unincorporated rural settlements are likely to be far less resistant to undesirable changes that influence rural character and subsequent place-making. Understanding that rural communities have different structures and capacities is the first step in developing strategies that empower them. The second is determining how they are similar and different in terms of design and policy opportunities. One avenue for exploring this is

through the investigation how different rural communities define and identify rural character.

Chapter 2 Critical Theory

Introduction

Research considering rural character, specifically, is relatively scarce in contemporary literature – particularly as a design field. In the rural sociology research family, however, rural character is often discussed less formally in terms of people, landscape, and the interface of the two as a function of reconciling human and natural systems integration. In design disciplines, the idea of “genius loci”, a term of art describing the intangible experience unique to a place, becomes an informal, yet heavily relied upon measure of design effectiveness. Designs that create, recreate, or enhance it are widely considered to be successful. The benefit of this is that it is a site specific contextual qualifier – by definition, genius loci supports place-making. For people, however, rural character can be deeply experiential and difficult to quantify, which makes it a strong candidate for qualitative research across a wide range of social sciences.

Much has been written recently about the importance of rural character and how to define it. While progress has been made, it is not necessarily to the satisfaction of planners and designers working in the rural realm because policy and designing interventions rely heavily on context to justify intention. Even though it has proven elusive, research has provided important findings about rural character as a general concept. Findings from Tilt et al. support the long-standing idea that visual quality is a vital component for understanding perceptions of rural character (Arendt, 1994; Halfacree, 2007; Strumse, 1996; Sullivan III, 1994). Their findings emphasize the importance of cognitive perceptions such as community, livelihood, and change to provide context for rural planners and it points out that it is often planners that

accessing the most limiting parameters when defining and identifying rural character (Tilt, Kearney, & Bradley, 2007). The research sampled two incorporated rural towns and concluded that urban and rural residents use similar conceptual descriptors of rural character, but have significant differences in how they identify it visually. This thesis expands on the idea that perceptions of rural character may be multi-scalar and uses a sample of unincorporated rural residents for comparison to test this idea. The research design and analysis are heavily influenced by the work of Tilt et al. and others investigating cognitive and visual perceptions of abstract concepts like rural character.

Vectors of Rural Change

County planners often struggle with rural character because of the complex relationships between people and place that influence it. When the directive to expand private property rights is enforced, the results tend to be skewed away from place-based development toward a highly engineered type of development that forces a lifestyle on the land rather than allowing the land to influence the lifestyle. The issue is complex because land use is ultimately about economics. At the root of many rural planning decisions is an intention to protect or expand economic opportunities as a property right. Conflict can arise, however, because not every landowner in a zoning district will participate in the land use that density zoning is trying to protect. In an unincorporated rural community, this has the potential to alter the function and structure of the community without ever directly involving it. Residential land conversion, even if it occurs near an unincorporated community has the potential to affect local human dimensions and natural systems. Some impacts

are physical, like changes to wildfire risk, aquifer integrity, land use, and landscape pattern (Abrams & Bliss, 2012; Gosnell & Abrams, 2009; Marcouiller, Clendenning, & Kedzior, 2002; Nielsen-Pincus et al., 2010). Other impacts are more abstract, like the introduction of new landscape meaning and definitions of “rural” (Abrams, 2011; Alkon & Traugot, 2008; Esparza & Carruthers, 2000; Kondo, Rivera, & Rullman, 2012; Post, 2013).

Residential Land Conversion

The changes resulting from residential land conversion are well researched and span both human dimensions and natural systems, which provides a well-rounded theory framework to explore direct and indirect changes to rural character. Lokocz et al. (2011) found that the rural character of a place can be lost as more residential housing is constructed. Their findings suggest that new development in rural areas place financial burdens on longtime residents as property values increase. Interestingly, her research also supports findings from other length of residency research (Johnston et al., 2003) that long-term residents consider natural features to be less of a contributor to rural character than newer residents. Long-term residents indicated that cultural elements contribute more to rural character than did newer residents or visitors (Lokocz et al., 2011). This research also supports findings by Williams and Stewart (1998) who propose that negotiating a shared sense of place that incorporates both natural and social history may make it possible to build a level of consensus around sense of place because it readily leads to discussion of desired future conditions of a resource in both ecological and human terms. Beatley’s (2004) findings support the argument that places that foster social

interactions and facilitate community building tend to have community members with higher levels of emotional and physical health. Together, these findings become increasingly important as social and economic forces place recent and long-term residents in positions to engage in social conflict (Lichter & Johnson, 2007; Lichter et al., 2010; Ryan, 2002, 2005, 2006; Theobald et al., 1996)

Research by Ryan (2006) suggests that preserving rural character, even without the influences new residential development, is challenging because changing agricultural practices reshape rural landscapes. His findings also indicate that preserving rural character is widely supported, but particularly so by local residents and planners. This supports finding by others that suggest that regardless of their relationship to a community, residents, visitors, and planners agree that rural character should be protected (Lokocz et al., 2011; Ryan, 2002; Tilt et al., 2007). Additional findings from Ryan's study concluded that professional planners tend to have a more limited view of the type of development that is appropriate for rural areas - meaning that local residents may be more accepting of well-designed rural subdivisions with ample protected open space than local planners (Ryan, 2006). This identifies a sticking point for developers and established rural residents, however, because developers must balance the desires of buyers with the directive to increase the wealth of shareholders or partners. This leaves little room to negotiate the wishes of adjacent communities in terms of design. If the county government has no ordinance for design standards or no mechanism to implement design review, the long-term residents may not have any tools to advocate for themselves. Without county protections, unincorporated communities must find

creative ways to lobby developers to respect their culture and property rights. If viewed as a type of disturbance, new developments in rural communities have virtually no obstruction and rural communities have no protections and no mechanisms to adapt to rapid change. Some of these changes can place tremendous social and financial burdens on rural residents (Riebsame, Gosnel, & Theobald, 1996; Theobald et al., 1996).

Rural Planning Capacity

Despite the low legal capacity for unincorporated communities to plan for themselves, there are well-established county, state, or federal level planning tools that may be able to function as guiding documents. Hazard mitigation plans for wildfire, flood, and landslide are examples of comprehensive planning tools that consider human settlements, regardless of incorporation status, as primary stakeholders. Additionally, there are important environmental regulations at the state and federal level that may be able to stem some biophysical impacts related to ground and surface water quality. Further investigation of hazard mitigation planning tools and environmental quality regulations is needed to determine if they can be used to directly or indirectly protect rural character. However, there is evidence in the literature on exurban development that suggests they may be effective tools.

Nielsen-Pincus et al. (2010) studied the impacts of rural residential development on biophysical aspects of rural places by simulating various growth management alternatives at a county level in North Idaho. Their findings were inconclusive in terms of identifying an optimal solution, but the alternatives they explored all resulted in probable increases in wildfire hazard index, threats to aquifer

integrity, loss of economically significant land, disruption of forest management and ecosystem processes, and could induce social conflicts. The capacity of county governments to address these issues varies across the state, but in terms of protecting people from natural and human induced hazards, many county governments are limited by the very policies they created to protect private property rights. Under this policy regime, there is very little a county government can do to regulate where on a parcel a landowner decides to build a home. Even if a county had good policies with iron clad legal justification, the information they use to determine accurate floodplains, landslide prone area, or wildfire risk is often out of date by decades. State and federal agencies that develop regional plans for hazard mitigation may have access to better data. Additionally, they can work with county governments to guide development away from hazards or environmentally sensitive areas.

Perhaps the most pronounced hazard obviated by rural residential development is wildfire risk. According to research by Theobald and Romme (2007), the number of low density residential homes in wildland-urban interface (WUI) areas is in the tens of millions and between 1970 and 2000 experienced a 52% increase in area. They report that approximately 89% of the WUI is privately owned, despite the majority of it being in high severity fire regime classes (Theobald & Romme, 2007). They go on to speculate that the majority of increases in WUI settlement in the future is expected to be in the high severity fire prone areas of the Western states. Despite the low density nature of this trend, there are clear implications for rural communities that will be impacted by the increased demand for fire suppression resources. In

terms of rural hazard mitigation, the need to inventory and plan resource availability between rural communities and only increase. This is likely to encourage more social conflict in rural communities, especially in places where experiential knowledge has resulted in landowners using land management practices that lower wildfire risk, but where new residents have no historical knowledge of how much danger they are placing themselves by residing in the WUI.

Burby et al. (2000) found that communities with a coherent land-use plan and hazard mitigation strategy were able to build settlements that were resilient to natural disasters. They found that these settlements were able to recover quickly from natural events and able to last for many years with little cost in dollars or lives to their inhabitants. They also found that assistance from higher levels of government was essential to local commitment and that communities must be both visionary and pragmatic in using site-specific approaches, integrating hazard mitigation into their normal development. While this study focused on hazard mitigation for flood and wildfire, the argument can be made that encroaching developments and gentrification are also types of hazards because they have the ability to fundamentally change the physical and social aspects of rural communities. Unincorporated communities are not required by Idaho's planning legislation to prepare plans, but they are also not explicitly barred from creating them. The issue is that they do not have local authority to implement or enforce them beyond private property boundaries without incorporating into a city. However, counties must align comprehensive plan goals with zoning ordinances and comprehensive plans often include goals to protect rural character. In some instances, general policy

protections for rural character may be able to reduce hazard risk, As stated, the convention is to use traditional density zoning to protect rural character, but there is no hard and fast rule stating that this is the only way. If definitive ideas of rural character can be identified, planners may be able to justify other policy mechanisms that support the goal of protecting and preserving rural character, while acting to mitigate hazard risks for new rural developments.

Rural Gentrification

Along with increases to hazard risks to people and property, there are also important social and cultural implications associated with rural residential development and the subsequent influences on rural character. The concept of place-making and sense of place are closely linked with cultural attributes of place, as well as the biophysical attributes of the natural environment. As new influences on culture are introduced into rural places, they may manifest as changes in visual quality, use of the land, spatial segregation between classes or races, or other changes that result more from individual preferences and less on cultural landscapes or landscape influences. These preferences are often for urban-type amenities or lifestyles that demonstrate attempts to redefine “rural” by deconstructing it into its basic components and making substitutions that are not place-based or traditional. These new ideas of place supplant old ones incrementally as traditional place-making processes are lost over time.

Bishop (1994) describes the threats to rural design in Britain as answers to questions about what is eroding or preventing identity and distinctiveness in rural places. He outlines four issues emerging from discourse generated about the topic.

First, commoditization of place and the “pressure towards standardization”, which he points out is most evident in the materials, forms, layouts, and details of structures like housing and agricultural buildings. Second, Bishop describes suburbanization, which he states is closely related to standardization, as the importation of non-rural context and scale. The results, he states, “may be good in their own right; they are just inappropriate in rural settings” (Bishop, 1994). The third threat he describes is the exploitation of rural imagery and mythology by business and the media, which perpetuate a rural idyll that is static and idealistic. Fourth, Bishop points out that the exclusivity of architectural professions has resulted in a development culture where in the term “architect-designed” is used to misrepresent customization as merely a choice of developers’ standard facades and layouts. He goes on to state that a neutral intermediary organization or committee may be able to span the disparate power and influence gap between local government planners and developers to bring the voice of localism back into the game of rural design and development (Bishop, 1994).

Ghose et al. (2004) describes the process of rural gentrification as remaining “largely unnoticed” in amenity rich areas in the United States while much more light has been shed on urban gentrification beginning in the 1990s. He states that as growth of population in rural places offering a higher quality of life increase, these areas begin to see widespread changes in local cultural landscapes that generate debates over in migration phenomenon like sprawl, housing, employment, land use change, and community identity. The conflicts that arise, he states, between recent and long-term residents are outcomes of the process of class colonization, where

newer residents tend to have more affluence than established rural populations (Ghose, 2004).

Gosnell and Abrams (2009) describe the process as an evolution that can be demonstrated as traditional land uses, economic activities, and social arrangements transition to those associated with “post-productivist” or “multifunctional” landscapes, which bring with it changes to land ownership, use, governance, and composition and socioeconomic dynamics (Gosnell & Abrams, 2009).

Hines (2010) describes rural gentrification of the northern Rocky Mountain region as a form of “permanent tourism” where in young, ex-urban in-migrants expand the “postindustrial class – cultural space” into landscapes that were primarily cultivated as lands characterized for the production and consumption of commodities. Hines describes this process as the writing of a new narrative using landscape meanings traditionally reserved to tourists and thus not a permanent influence on local cultural landscapes. Instead, however, these new rural residents colonize and anchor these new meanings through involvement in local special interest groups and political institutions that can change the meanings used by long-term rural residents (Hines, 2010).

Stedman (2003) tested the idea of place meaning as a strictly social construction. His findings suggest that landscape attributes are important in the development of sense of place, specifically in terms of place attachment and satisfaction. This supports previous research investigating the role of the physical landscape in the development of individual ideas of place and sense of place (Ryden, 1993; Shields, 2013). Stedman asserts that place attachment and

satisfaction are underpinned by landscape characteristics, but in different ways. Satisfaction seems to have an inverse relationship with the degree of human impact on the landscape, while place attachment seems to be a function of the role that the landscape plays in meeting individual desires and needs of a place (Stedman, 2003). For example, a less developed location may meet needs for “escape places”, while a more developed landscape may meet the need for “social places” (Stedman, 2003). In terms of design, Stedman’s findings suggest that satisfaction and place attachment can be influenced by thoughtful design.

Lichter et al. (2010) described the residential segregation of Hispanic populations in new destinations, including suburbs and rural towns, as an indirect measure of ethnic relations between Hispanics and whites. Their findings support the notion that Hispanics are more likely to experience spatial segregation in suburban and exurban places than in established Hispanic areas, such as in urban centers. Further, this phenomenon “cannot be explained by place-to-place differences in ecological location, population composition, economic growth, employment, or Hispanic-white income inequality” (Lichter et al., 2010, p. 215) leading the researchers to conclude that even when Hispanic populations are assimilated in terms of the local economy, they still may not experience spatial assimilation. This demonstrates the impacts that social conflicts can place on rural character, particularly spatial elements of rural places.

Lewicka (2008) studied place attachment and place identity in areas that underwent dramatic political and cultural changes after World War II. Ethnic bias was identified strongly with collective memory, but different ethnicities used different

underlying mechanisms – local or national identity. She found that the degree to which place attachment is associated with higher (national) and lower order (local) identity can predict the amount of ethnic bias of the pre-war past of the study sites. This study suggests that as communities experience increasing diversity and social change, they may see a trend toward diverging community identities drawn along ethnic lines, where the reliance on localism becomes a bright line distinction between groups.

Theobald et al. (1996) found that seasonal recreational tourism contributes to unstable service-sector employment, which many rural communities are sensitive to because of relative impacts on small local economies. Their findings suggest that long-term residents see this transition as an attack on rural culture because it leads to lifestyle conflicts between long-term and recent residents with different ideas of rural living. Respondents reported increased conflicts between new and long-term residents, which long-term residents contributed to a misunderstanding by new residents and visitors of the local traditions and culture. They also found that land development trends in the Rocky Mountains tended to reduce access to both private and public lands. The researchers also uncovered conflicts arising from new tax revenue from new residential and second home ownership. As land values increased in the study area, conflicts with the county government increased because residents felt they were not receiving a proportionate amount of services in exchange for taxes paid. Additionally, as land prices increased because of demand, affordable housing in or near rural communities became scarce. They go on to report that affordable housing has been a common problem in developing mountain

areas, but as service-sector jobs become more available in these areas, workers experience difficulty affording housing close to the new jobs and eventually face the decision of moving out of the community to afford housing. They describe this as an aspect of “heightened class distinctions”, which they found led to conflicts in areas that experience rapid, affluent residential development. This type of rural gentrification is an important vector of rural change because it not only forces legacy residents out of communities; it also shifts community political influence and power into the hands of stakeholders with the most investment in private land. In this sense, the county government’s focus is distracted to protecting property rights (i.e. property values) instead of expanding them (i.e., deregulation on private lands). Rural character, which can be viewed as a property right, can then be used against long-term rural residents in the name of protecting property values if it does not subscribe to the ideas of new rural residents.

Sinden (2007) describes private property as a faulty solution to the problems of unsustainable use of common pool resources. Even when private resource markets exist, as with water markets or environmental trading market, participants rely on government involvement to decide how much of the resource is available for private use. The author proposes a similar analysis for private property, where land owners are simply describing the ability to exclude all others from using their land, but not necessarily from degrading it when they exercise private property rights on adjacent property. The failings of private property to address ecological degradation beyond private property boundaries obviates a third assertion by Sinden – there is no purely governmental solution, either (Sinden, 2007). This suggests that a

combination of policy and grassroots generated solutions are necessary to address the differences in how recent and long-term rural residents view property rights. Viewshed protections, nuisance ordinances, and regional groundwater management plans are examples of where the different definitions for property rights converge.

Alkon et al. (2008) explored place as a social construct generated by people attempting to relate to unfamiliar people and settings while refining notions of their own place. Their findings suggest that people develop ideas of place by highlighting differences, particularly potential risks, through the comparison of their own place to others. This is based on first-hand experience, but it is not the only way social constructs of place are devised. Their findings also suggest that people use indirect experience by constructing “place meta-narratives” through a process of assimilating broad, culturally available notions for different types of places. Through these comparison processes, people develop general ideas about “where they are, who they are, and what should and should not be done in a particular locale” (Alkon & Traugot, 2008). Further, these ideas can be used to refine the social construction of their own place through the selection of policy alternatives that move it closer to preferences that stem from place comparison and place meta-narratives (Alkon & Traugot, 2008). Through this processes, people triangulate refined descriptions of their place by selecting away from what it is not. This allows people to assign esoteric meaning to a place despite using general terms to describe it.

For rural character, social conflict is an indicator of the destabilization of the factors that influence it. How it manifests visually depends greatly on agreement between landowner and community member preferences and experiential

expectations, which affect parcelization, density, land use, and a host of other characteristics linked historically with participation in one or two dominant land uses. The factors that influence it are inextricably linked to how people decide to experience the land. If developments introduce new ways of living in and experiencing the land that are intentionally disconnected it, the processes that contribute and influence rural character are also disconnected from it. This means that rural communities can look or feel like anything and still be considered rural simply because they are in a “rural” landscape. This is not necessarily detrimental, but it does create a market for “rural living” that has nothing to do with traditional rural lifestyles, but requires the same land. When that land is shared with members of an unincorporated community that has endured for a century or more, the risk of losing important sources of cultural identity and economic vitality for the state become very real. This is a phenomenon that is virtually unheard of with incorporated rural communities because of their ability to regulate not only within their jurisdictional boundaries, but also within the Area of City Impact. This disparate level of autonomy obviates the need to investigate the differences between incorporated and unincorporated settlements. A convenient way to do this is through the comparison of visual and cognitive perceptions of rural character, which research has indicated to be important to people regardless of what type of community they live in.

Chapter 3 Methodology

Introduction

In order to develop a nuanced understanding of how rural character is defined and identified by residents of different types of rural settlements, two primary research methodologies were utilized as part of a comprehensive online survey (Appendix A). First, a Conceptual Content Cognitive Map (3CM), was adapted from interview research design developed by Austin (1994) and Kearney and Kaplan (1997). Second, a photo-questionnaire (Kaplan & Kaplan, 1989) was used to gather data based on visual cues for the identification of rural character and preference for various levels of rural character between groups of rural residents. Additionally, open-ended and multiple-choice questions were posed to gather more specific information about potential influences and values for rural character and the residential location preferences of respondents.

Individuals from a variety of residential settlements were identified and targeted for sampling to gather as many opinions and views on rural character as possible. The groups targeted were residents of various types of rural settlements ranging from small incorporated towns to rural hamlets.

Sampling Procedures

Because of the challenges associated with sampling unincorporated rural communities with small populations, 200 direct mail postcards were sent to residents in four unincorporated communities asking for their participation and directing them to contact the researcher or visit the website describing the survey they were being asked to take. These communities were Harvard, Viola, Santa, and Lenore – all

communities in North Central Idaho. Additionally, to distribute the survey statewide, organizations with specific interests in rural settlements were targeted and asked to advertise the survey to their memberships via email. The groups approached were the Idaho Association of Counties, Idaho Rural Partnerships, and the Idaho Chapter of the American Planning Association. These groups agreed to forward the invitation to their memberships along with an introductory letter explaining the survey and asking potential respondents to forward the survey to individuals living in small, unincorporated rural communities. Increases in respondent activity were seen for several days after each group forwarded the invitation to its membership.

The nature of the survey was in-depth and comprehensive, which justified the use of a small sample from the groups targeted. Despite this, the sample is likely to be biased toward individuals with more access to the internet, rather than from the general rural population of Idaho. Although libraries and some schools allow local residents to use computers connected to the internet and smart phones are widely available, the online surveys are often in danger of selection bias (Zhang, 2000). However, while the largest percentage of respondents self-selected, efforts were made to reduce sample bias. The survey was presented at two county fairs in association with University of Idaho Extension booths. Unfortunately, most people interested in taking the survey at the fairs had small children, which limited the time they could spend. Only four surveys were collected between the two fair events.

The survey was widely available to Idaho resident with internet access and the request was made to each respondent that the survey be forwarded on to family, friends, and neighbors living in rural communities. Additionally, the survey was

advertised in the Teton Valley News, a local newspaper in one of the Nation's most parceled, but undeveloped regions near the border with Wyoming's rapidly urbanizing Teton Valley settlements. This unsolicited advertising occurred at the end of the survey's open period, however, and did not generate participation by very many residents of this area. Despite the challenges associated with sampling rural populations, the percentage of respondents for each part of the survey that reported living in unincorporated communities was higher than those who reported living in incorporated rural communities.

Participants

A total of 81 people participated in the survey with 36 completing the survey in its entirety. Of the remaining respondents, five completed the Conceptual Content Cognitive Mapping section and three completed the photo-questionnaire, but opted not to participate in both sections of the survey after it was started. 36 potential respondents began one section of the survey, but did not complete it, and chose not to continue. In order to retain as much integrity and service possible, the conceptual content cognitive map and photo questionnaire were treated as independent instruments during analysis. Of the respondents remaining after incomplete surveys were removed from the sample, 37 completed photo questionnaires and 44 completed the Conceptual Content Cognitive Map. Within the photo questionnaire, 20 respondents identified themselves as living outside of an incorporated city, which equates to 54% of the sample. For the Conceptual Content Cognitive Map, 45 respondents completed each step. Of those, twenty-four identified themselves as residents of unincorporated communities. This is 53.3% of the sample.

Very little duplication was reported among specific communities identified as places of residence by respondents. At most, only three respondents identified as being from the same community. Further, the communities identified represent diverse residential location choices in terms of population, climate, topography, and dominant land cover due to the decentralization of the sample.

Length of residency reported by respondents ranged from less than one year to seventy years, with a mean of 21.81 years for the conceptual cognitive content and 19.58 years for the photo questionnaire. Using 20 years as the cut off for “recent residents”, the 3CM participants can be split into two additional groups- “recent unincorporated residents” and “long-term unincorporated residents”. This provides 12 recent and 12 long-term unincorporated residents and 10 recent incorporated residents with five long-term incorporated residents.

Study Site/Context

Rural places in Idaho are facing unprecedented change. Currently, Idaho has one of the largest rural populations of any state in the nation. In 2010, 30% of Idaho’s population lived outside of urban jurisdictions, which is significantly higher than the national average of 20%. Unfortunately, Idaho’s rural population is steadily declining. Before the economic downturn of the last decade, new residents to Idaho chose rural places at nearly twice the rate of the national average (Salant & Porter, 2008). Before 1980, four in ten Idahoans lived in rural communities. This number has since decreased to three in ten as of the 2010 Census. Despite this, rural residents still have a significantly larger share of the populace than in most other states. This is not to suggest that every rural community is experiencing population

decline. In fact, some rural communities are growing. Most of Idaho's population growth is occurring in its largest urban centers, which are growing at approximately 3 times the rate of rural towns (U.S. Census Bureau, 2012). Much of this growth can be traced to in migration from outside of Idaho, driven by the desire for access to rich, diverse natural amenities. However, the fastest-growing demographic in Idaho is Hispanic and they are selecting to reside in rural communities over urban centers (Dearien & Salant, 2010).

Only nine of Idaho's 44 counties meet the population requirements that trigger an "urban" designation by the US Census Bureau, which requires a population that exceeds 20,000 (Dearien, 2010). Most are located in the South, but all have nearly unencumbered access to high-quality natural resources like lakes and mountains, ski resorts and national forest trailheads – often located in adjacent rural counties or in the remote corners of urban counties easily accessed by well-maintained transportation corridors. Because many of these natural amenities can be easily accessed, they contribute to a shared experience with the land for urban recreationists and a growing recreation and tourism economy for many rural places. However, this does not necessarily mean that tourists from urban centers and residents of rural places see the natural amenities in the same light. What may be an important recreation resource for urban tourists could be an important part of a rural areas natural resource-based economy.

In 2013, Idaho ranked as the fifth fastest growing economy in the nation (Brody & Ellis, 2014). The single largest driver of the state's economy during this time was agriculture, which increased by 15% in 2013. Agriculture, along with

resource extraction industries, like mining and logging, not only sustain rural economies with their commodity exports, but also anchor the state's cultural identity in Idaho's rural lands because this is where the majority of activity for these industries takes place. This elevates the status of Idaho's rural landscapes from working lands to cultural landscapes because they are the physical foil upon which livelihoods are based and the fabric from which rural cultural narratives are woven.

Landscape Heritage

Idaho has many historic settlements that trace their roots directly to mining, logging, or agriculture. Viola, in Latah County, is one of the state's first agricultural communities. It was also an important wagon depot and base for miners after gold was found in the Palouse mountain range. Santa, in Benewah County, is the first settlement in Idaho to be platted by a woman. Before Idaho was granted statehood, Santa, or the area that would become Santa, was an important distribution center for logging operations in the surrounding forest. Kellogg and Wallace, in Clearwater County, boast rich heritage rooted in working some of the world's richest silver mines. Places like these adorn Idaho, and each has a unique cultural heritage rooted in the community's common experience with the landscape. These legacies, however, and the landscapes inextricably linked to them are under threat from encroaching developments, and subsequent cultural changes that circumvent the historic place-making mechanisms that help maintain the common local culture that has been woven over generations of exchange between human and natural systems.

New rural subdivisions, and in some cases large lot single-family residences, have been making their way out into unincorporated lands for decades. When the density of these developments resembles more urban than rural, we call it “sprawl”. In context, these developments are very beneficial. When they are located near urban centers, particularly in areas of city impact that are slated for annexation in the future, subdivisions can create safe places for families and children, opportunities for residents to control the quality of services provided, and result in a larger selection of quality housing. However, as subdivisions move further out into unincorporated lands, they increase the rates of parcelization, result in the development of infrastructure for the provision of services that are not traditionally found in unincorporated lands, and draw in new rural residents with new values and worldviews created from very different experiences with the landscape than those of their new neighbors. Research by Lokocz et al. (2011) reveals that nonlocal visitors to rural places use the natural landscape rather than the built environment of a place to ascribe rural character. This is only half of the story of in rural community design, however. Lokocz et al. found that local residents use structures and sacred places to ascribe rural character rather than purely using the natural landscape. This research suggests that as new rural residents move into unincorporated landscapes, they may be bringing with them nontraditional ways of identifying rural character. When rural subdivisions are organized and politically active, this could cause a shift of power and influence away from sources of traditional meaning toward new, more powerful, residential groups that have less attachment to or investment in the historic relationships between human dimensions and natural systems. For example, Viola is



Figure 3.1 An example of new development in rural communities.

the first agricultural community in Latah County, but its proximity to Moscow provides opportunities for employment outside of agriculture and natural resources industries. As a result, many residents of Viola work in Moscow. Depending on the level of income, this has provided vectors of change to both the human dimensions and natural systems. A wealthier resident may buy a large lot and build a large home on a hill that has been farmed for 100 years. Since this land is no longer in cultivation, it changes the visual quality of the landscape incrementally. For example, Figure 3.1 shows a home on approximately 6 acres in Viola with an asking price of \$485,000 (Realtor.com, 2014).

Over time, the cultivated land gets pushed further away from residences – especially if the preferences are for wooded landscapes rather than cultivated ones. Eventually, the farmer will pass. If his children do not continue farming the land or if it is not sold to someone who will farm it, it will go fallow and perhaps be purchased

by a developer. In places like Viola, this is a very slow process, but that is why it is so dangerous. Because of its proximity to Moscow, Viola is slowly transitioning into a bedroom community, wherein the residents, with a preference for country living, work outside of town and have abandoned the traditional land uses upon which Viola was founded. Since Viola has no economic base other than agriculture and a few small businesses that do not provide services to the local residents, any money being brought back into the community by people working outside of the village is being spent someplace else. Thus, the primary industry is still agriculture, but the number of people working and the amount of land in cultivation are declining as the demand for rural parcels goes up. Eventually, the traditional architecture is dominated by modern looking homes and the traditional rural forms derived from the relationships between people and landscape are lost to the preferences of people with new experiences with the local landscape.

Measurement Instruments

The survey was presented as the “Idaho Rural Character Survey”. It included two primary sections—a Conceptual Content Cognitive Map with several follow-up questions and a Photo-Questionnaire, which also included several questions between distinct sets of photos. Each section was design to take approximately 15 minutes to complete for a total of 30 minutes. However, because of the nature of an online survey, respondents were welcomed to take as long as they needed to complete each section. Additionally, the survey was designed so that respondents could do one or both sections as one event and login at a later time to complete the survey. Most respondents chose to complete the survey as one event.

Conceptual Content Cognitive Map (3CM)

The 3CM section of the survey is adapted from a card sorting technique developed by Kearney and Kaplan (1997). It is designed to allow researchers to “access” and knowledge structure regarding an abstract issue—in this case rural character. It has been used successfully in research on what is meant by “good forest management” (Kearney, Bradley, Kaplan, & Kaplan, 1999) and by Bouma (2000) in research to understand stream “health”. In addition to having respondents list important concepts and ideas related to an abstract issue, it allows them to organize and rate the individual items in a manner that is fast, easy, and pleasant (Kearney et al., 1999; Kearney & Kaplan, 1997).

For its use as an online instrument, each step was performed as a discrete activity in a manner that allowed respondents to reference their inputs for the next step. First, respondents were asked to perform four simple activities beginning with this prompt.

“I’m interested in what rural character means personally to you. Please think of a place that you would describe as having rural character. What does it look like? What does it feel like? What makes this place stand-out in terms of rural character? In your mind, what attributes would describe rural character? Please list these attributes that come to mind when you think of rural character.”

Based on the prompt, they were asked to list attributes, words or phrases that they felt were related to rural character. An optional activity was provided for respondents who needed assistance generating attributes for the previous activity. Instructions for this additional activity allowed respondents to skip it if they were

satisfied with the first activity, to use it for additional space if they needed any, or to use it as an opportunity to respond to help prompts.

“If you find yourself struggling to describe attributes of rural character, here are some things to think about. If you don’t need any help, skip this question.

- a. Open Space/Nature.
- b. Community or Family
- c. Natural resources industries (timber harvesting, mining) or agriculture (farming, ranching)
- d. Threats to rural character”

Twenty additional spaces were provided in this activity, but respondents could return to the first activity if they needed more space to list attributes. Next, respondents were asked to review the previous two activities and create groups or collections consisting of the attributes they listed in the first activity. Respondents could create the groups from collections of the line numbers associated with attributes from the previous activities or use the words for the attributes to create the groups. The instruction was given that these groups should be created from attributes that the respondent felt had some association with one another and that the associations could be based on anything that came to mind. Next, the respondent was asked to assign a word or phrase to each group that described why those particular attributes were placed in the same group. Space was given, so that respondents could label each group and provide a short description to justifying the label. Finally, the respondents were asked to rank each group based on order of importance to them. This activity was set up so that each group could be ranked from most important to least based on a numerical ranking system with one being most important.

Photo-questionnaire

The use of photo-questionnaires in design research is well-founded as a method for uncovering preferences of individuals for one environment or element over another. Their design and use as a research method has been developed over time by Kaplan and Kaplan (1989) and Kaplan (1985).

Photos of residential and commercial areas were taken by Brooks (2013) and combined, with permission, with images taken by Bradley and Kearney (1989) to create complete photo-sets for residential and commercial scenes. The borrowed images were also used by Tilt et al. (2007) to research rural character in small incorporated rural towns in Western Washington. The majority of images were taken from the communities of Moscow, Idaho with several images used from the communities of Harvard, Viola, and Santa in Idaho and Uniontown in Washington. The images were selected to represent several specific design interventions corresponding to density, architecture, infrastructure, and landscape. A variety of lot sizes and structures representing a variety of styles and ages are also included in the photo sets.

A photo set composed of aerial images was also provided to respondents. This photo set was composed of a collection of images gathered from Google Earth (Google Earth, 2014) and supplemented by images taken by Bradley (1999) and used in previous rural character research (Tilt et al., 2007). As with the residential and commercial photo sets, this photo set was rated by respondents according to the perceived rural character and then again for their preference for elements of the image.

Table 3.1 Example 3CM Map from the long-term rural resident group

Physical Characteristics	Social Life/Community
Low population	We know our neighbors
Low traffic	We help each other
Enough distance from population centers to minimize influence	We are like family - we fight among ourselves, but join together for adverse circumstances
Feeling of open space	Children benefit from safe, calm, connected community
Access to country, including forests, river, lakes	Children benefit from outdoor lifestyle
Enough distance from population centers to minimize contact	Children benefit from hard work
Nearness of countryside	We feel accepted, for the most part, by each other
Peace and quiet	
Economic	Outside Threats/Political
Jobs are important, but can be difficult in a resource based economy	We feel we are often not heard on the state and national level
Rural people often have an independent spirit	We feel our social values are often not acceptable to the wider population
People with an independent spirit often want to own their own businesses	We feel our political values are not valued in the wide population
People with an independent spirit often want to own their own businesses	Our county is 97% federal, and the neighboring county (Lemhi) is 96% federal
Government regulations can stifle commerce	Sometimes newcomers try to change the community to their preference
We often feel the federal gov't is a bully	Often we hold two jobs to make it
	Outsiders or newcomers have more time than locals do, to try to influence Sometimes outsiders or newcomers lack respect for rural people and their intelligence or education level

In addition, four additional photo sets were included in the photo-questionnaire for later analysis. These photo sets were selected to represent a variety of potential design elements that might be found in different types of rural

communities. Respondents were asked to rate these images only according to their preference for them. The elements addressed in these photo sets were gateways (8 images), roadsides (14 images), multifamily housing (7 images), and open space (8 images).

Twenty-eight street-level images with residential and working structures were grouped according to the degree of density represented by each image-high, medium, or low. They were further divided into groups according to the level of vegetation and its location in the foreground, middle ground, or background. Fifteen commercial images were presented as one group, but various types of structures were represented-including traditional main street, multistory buildings, adaptively reused structures, cottage, and small strip centers. The aerial photo set, composed of 28 images, was broken down into groups based on representations of high, medium, or low density settlements and by the amount and arrangement of land cover to more accurately represent the varying degrees of wildland-urban interface found in many rural communities.

The images for each photo set were stored on tinypic.com and the image location was used to create the photo questionnaire on surveymonkey.com. Each image was reduced to 800x600 pixels, so that each image would appear the same size when it loaded in the survey. Several images, panoramic images borrowed with permission from Tilt et al. (2007), were smaller than the chosen size, but were not small enough to warrant resampling of the image to increase the resolution. The borrowed images were used in the condition they were received.

The questionnaire was administered after the 3CM task if the respondent selected to complete the survey in one event. Each photo set was administered independent of the others. The first three photo sets were separated by multiple-choice or open-ended questions asking about topics such as lot size and hypothetical changes to their community. Respondents rated residential scenes first, followed by commercial/business scenes, and then the aerial photo set was administered. After the aerial photo set, the four supplementary sets were presented.

In the first three photo sets, respondents were asked to use a five-point Likert scale to rate each image for its degree of rural character. The choices were “very low”, “low”, “moderate”, “high”, and “very high”. Directly below this scale, respondents were asked to rate the image based on their preference for it. The choices for this scale were “very undesirable”, “undesirable”, “neutral”, “desirable”, and “very desirable”. Each scale corresponds to a Likert value with 1 being the lowest possible score and 5 being the highest possible score for each scale.

Follow-up Questions

After the 3CM, respondents were asked to answer several multiple choice and open-ended questions designed to provide information about the respondent’s individual experience as a rural resident. This information was used to divide respondents into groups based on their residential location in an incorporated community or an unincorporated village and into groups of recent or long-term rural residents. Further, the follow-up questions allow respondents to be sorted into groups based on their beliefs about private property rights.

Additionally, respondents were asked to give their opinion on the impacts of tourism in their community, the appropriate level of economic development for their rural community, and their opinions on private property rights and whether or not they feel their local government should be more active or less involved in their community. In addition, respondents were asked to give their opinion on what type of residential developments they feel would be most beneficial to their community.

Between the residential and commercial photo sets, respondents were asked open-ended questions regarding what they like about their community and what they would change about it. At the end of the aerial photo set, respondents were asked their opinion about the appropriate size for the population of rural community. Additionally, they were asked to rank how important lot size is to rural character and give an estimate of the smallest lot size they feel is appropriate for the type of community in which they live. A final question asked respondents to select one of three options that best matched how they feel about mixed lot sizes in rural communities. The options were “It’s good”, “I don’t think it matters”, and “It concerns me”. This question is designed to gauge whether certain types of rural residents are more concerned about parcelization and land conversion and others. In addition, this question serves to provide insights about whether rural residents, associate community building with lot size.

Data Analysis

In order to determine the nuanced differences between rural residential groups regarding how they identify and define rural character, several different analyses were used. These analyses, both qualitative and quantitative, were chosen

to complement the data derived from the measurement instruments and were greatly influenced by those used by Tilt et al. (2007) in similar research on rural character involving incorporated rural towns, planners, and urban recreationists.

3CM Analysis

Each map generated by respondents was analyzed based on both its structure and content. The structural analysis consisted of determining the average number of concepts and categories generated by each group and using statistical analysis to compare them. Structural analysis works on the premise that the number of concepts or categories generated by an individual is related to the degree of “ownership” an individual feels or the intimate knowledge here she has over an abstract concept, such as rural character. The main concept and category numbers for each group were determined and comparisons of these means across the groups are made using independent sample t-tests.

Content analysis was used to determine the various concepts generated by individuals within each group during the 3CM process. Themes and sub themes for rural character were identified and compared between groups.

- a. The concepts in each individual 3 CM map were reviewed and concepts that appeared three or more times in any one group were used for the next level of analysis. All of the attributes listed by respondents were coded according to the concepts to which they most closely related. For example, the concept “independent” was listed by both groups overtly, but the concept was also addressed when respondents listed synonyms such as “self-sufficient”, “self-reliant”, or “room to do whatever suits”.

- b. The concepts referenced three or more times by any one group were then grouped together by sub-theme and theme. Sub-theme and theme groups are created by reviewing the concepts in the original maps and categories to look for patterns (see Appendix B for complete list of concepts).
- c. Independent sample t-tests were used to make comparisons between groups. Similarities and differences were identified in the percentage of participants in each group that included at least one concept belonging to a theme, and the mean number of concepts listed per person per group within a theme. Comparisons were made using independent sample t-tests on pairings of groups: 1) long-term and recent residents, 2) Incorporated residents and unincorporated residents.

Photo-Questionnaire Analysis

Factor analysis was used to reduce the data generated from the photo questionnaire into manageable, identifiable factors in order to develop conclusions about how rural character is identified by different residential groups. The steps used for this analysis were as follows:

- a. Exploratory factor analysis was run on each photo set (residential, aerial, and business) using Principal Component Factoring. Rural character and preference sets each received independent factor analysis runs. Factor analysis groups individual photos together based on a common characteristic. The criteria for factors to be considered in further analysis was that each factor must contain at least two scenes that loaded at a level of .45 or above

- in the factor analysis. Photos that were at this level, but loaded onto different factors, were not used in subsequent analyses.
- b. A reliability test was run on each factor found in each photo set. Alpha levels of 0.6 or greater were considered coherent.
 - c. New variables were created for each factor photo set representing the total mean of the ratings given for the photos loading with that factor.
 - d. The means for these new variables were then compared across the groups using independent sample t-tests to identify similarities and significant differences between the groups. Comparisons were made on two different associations of groups: 1) Incorporated residents and unincorporated residents, 2) long-term and recent residents.

Chapter 4 Results

Introduction

Results from each measurement instruments - 3CM and photo-questionnaire - are presented below. Discussion in the next chapter will elaborate on the findings.

3CM Results

Table 4.1 Meta-Themes and Themes generated during the 3CM process.

Meta-Themes	Major Themes	Sub-Themes	Concepts
Rural Place	<i>Description</i>	Environment	Wildlife, Open Space, Near Nature
		Land Use	Farming, Logging, Livestock
		Sense of Place	Descriptors of the Uniqueness of a Place
	<i>Experience</i>	Quality of Life	Safe, Peaceful, Slow Pace
		Use of the Area	Hunting, Fishing, Gardening, Recreation
Change	<i>Physical Change</i>		Development, Infrastructure
	<i>Catalysts of Change</i>		In-Migration, Misunderstanding of Culture
Community	<i>Gathering Places</i>		Town Hall, Club House, Church, Park
	<i>Social Capital</i>	Sense of Community	Small Town Feel, Heritage
		People	Help Neighbors, Know Everybody
Economy	<i>Local</i>		Locally-owned, Produce Stands
	<i>Limited Diversity</i>		Non-industrial, Limited Services and Jobs
Pattern	<i>Low Density</i>		Small Population, Drive to See Neighbors
	<i>Isolated</i>		Remote, Far from Population Centers

The average number of concepts listed by the participants was 12.9. Independent t-tests showed that no significant differences between the groups, 1) unincorporated residents and incorporated residents or 2) recent and long-term rural residents, existed in the number of concepts generated through the 3CM process. This suggests that each of the groups demonstrated similar knowledge and experience regarding rural character. Additionally, the content of the structures for each group do not vary significantly from one another, which suggests that regardless of the type of rural community or length of residency, residents of rural communities share similar values that shape their perceptions of rural character.

Content Analysis

The coding process revealed that thirty-six distinct concepts were mentioned by respondents three or more times by either group (Appendix C). Using the methods described in Chapter 2, these concepts were grouped into themes and sub-themes shown in Table 4.1. To simplify presentation, they have been further organized by “meta-themes”. In some cases, one concept was listed distinctly between the groups. As such, they warranted use as independent themes. They are *Local Economy*, *Limited Economic Diversity*, *Low Density*, and *Isolated*.

Rural Place Meta-Theme

The major theme *Description* was created to hold the different ways respondents described the visual elements and quality of rural areas. Many concepts described visual references to how respondents “saw” rural character, such as “farms and ranches”, “cattle”, or “split beam fence”. In contrast, the theme *Experience* included concepts that went beyond describing the area to describing

abstract concepts about quality of life in rural places and the uses of the land unique to rural places, such as hunting. Concepts such as “slow pace of life” and “outdoor recreation” were also included in this theme.

Change Meta-Theme

The Change meta-theme consists of two different major themes that each represents a several different, but related concepts. *Physical Change*, interestingly, was seen by all participants as a negative or threat to rural character. It included concepts referencing changes to the physical rural environments (e.g., infrastructure change, population growth or less, and loss of nature or sacred sites). The other theme, *Catalysts of Change*, was seen as either positive or negative by participants. The concepts sorted to this theme were more abstract in nature. It holds concepts that respondents described as leading to the concepts in the *Physical Change* theme. For example, the concept, “urbans moving in” is a Catalyst of Change because it does not cause change directly, but may lead to physical change concepts in rural character such as “more infrastructure” or “loss of nature”.

Community Meta-Theme

The Community meta-theme, like many others, has two themes that describe physical and abstract concepts related to social interactions. *Gathering Places* included physical places respondents associate with community feel or sense of community. Churches, town halls, parks, and the like are concepts sorted to this major theme. The second theme, Social Capital, represents broader sub-themes related to concepts that describe the community feel or the people living in a rural community. Unincorporated residents listed many concepts belonging to the

“People” sub-theme that described the behavior the might lead to a sense of community (e.g., helping your neighbors, visiting neighbors, being environmentally responsible, being civic-minded, and sharing common political, social, and cultural values).

Economy Meta-Theme

The concept of economy held positive and negative concepts referencing context and scale as demonstrated by the sub-themes of “*Local*” or “*Limited Diversity*”. Respondents listed concepts that specifically referenced locally owned businesses or low presence of industry or corporations positively and listed the lack of jobs and stores negatively.

Pattern Meta-Theme

This meta-theme holds concepts related to the spatial arrangement of parcels and structures in a community and the distance of a community from population centers. It was broken down into two sub-themes “*Low Density*” and “*Isolated*”.

Table 4.2 The percentage of individuals from each group including at least one concept in each theme.

Theme	Incorporated	Unincorporated
	n=20	n=24
<i>Description</i>	95%	96%
<i>Experience</i>	50%	67%
<i>Physical Change</i>	14%	17%
<i>Catalysts of Change</i>	5%	17%
<i>Gathering Places</i>	29%	13%
<i>Social Capital</i>	62%	61%
<i>Local Economy</i>	29%	13%
<i>Limited Diversity</i>	19%	4%
<i>Low Density</i>	10%	29%
<i>Isolated</i>	15%	25%

Similarities and Differences between the Themes

Several similarities were found among the different groups, both in terms of the percentage of individuals from each group including at least one concept in each theme and the average number of concepts that participants in each group listed for each theme. Independent t-tests were run between incorporated and unincorporated residential groups to identify significant differences. If no differences were found in the t-tests, and a one-way analysis of variance was run between total residents and each group. The similarities and differences are shown in tables 4.2 and 4.3.

Table 4.3 The average number of concepts that participants in each group listed for each theme.

Theme	Incorporated	Unincorporated
	n=20	n=24
<i>Description</i>	4.30	4.45
<i>Experience</i>	3.27	2.21
<i>Physical Change</i>	1.00	1.00
<i>Catalysts of Change</i>	1.00	3.00
<i>Gathering Places</i>	2.40	1.00
<i>Social Capital</i>	5.06	4.94
<i>Local Economy</i>	1.43	2.00
<i>Limited Diversity</i>	1.67	1.00
<i>Low Density</i>	1.50	1.44
<i>Isolated</i>	1.50	1.44

Independent sample t-tests determined that there was no statistically significant difference between groups in either the percentage of individuals in a group that included at least one concept in each theme (Table 4.2) or the average number of concepts that respondents in each group listed for each theme (Table 4.3). In many cases, the difference between each group is due to one or two respondents who listed a large number of concepts for one or two themes. From the Table 4.2, the highest percentages are for the meta-themes of *Description*,

Experience, and *Social Capital*. This was also the case for the average number of concepts listed by participants (Table 4.3). Only a few other meta-themes are of note with regard to the percentage of respondents addressing them and the average number of concepts listed by respondents – *Isolated*, *Local Economy*, *Gathering Places*, and *Physical Change*. These meta-themes are interesting because they reveal that rural residents are aware of the relationship between people and place in terms of building social capital and supporting a strong local economy.

Photo-Questionnaire Results

Factors uncovered in the analysis of each photo set were analyzed to determine the holistic score for rural character and the preference by the respondents as a group. They were then analyzed to determine if differences exist between how each group (unincorporated and incorporated) rated the photo-sets.

Residential Scenes

The results of the factor analysis performed on the residential photo set are found on Table 4.4 for both the rural character rating and preference rating. The standard deviation and Cronbach's alpha for reliability are also found for each factor. The factors crossed all density and vegetation groups that the researcher had originally used to group the photos (see Appendix A). A similar pattern was seen in each of the additional photo sets rated for both rural character and preference. Table 4.5 shows the group means for the photos loading to each factor. Means notated with alpha symbol (α) are found to be statistically significant at the 0.05 level.

Residential Rural Character Factors

Four factors were found in rating the residential photos for rural character – *Neighborhood, Land Use, Estate, and Screened Parcels*. The highest rated factor in the residential photo set is the “Land Use” factor. The scenes within this factor show working structures or ranch style homes set in open landscapes with either fenced pastures or cultivated fields. Images 2, 8, 11, 13, 22, 24, and 27 loaded strongly to this factor. Independent t-tests revealed a statistically significant difference between how residents of incorporated rural communities and unincorporated rural communities rated the images based on this factor (Table 4.5).



Figure 4.1 Residential #24 Total Mean = 4.44



Figure 4.2 Residential #26 Total Mean = 2.17

For the *Land Use* factor, the mean ratings for the majority of images loading to this factor fall into the high moderate rural character rating, while the means for the same images from the incorporated rural residents fall in the high rural character range. Images 24 and 27 were ranked the highest by both groups for this photo set, which fell in the mid-high rural character range. Image 24 shows working buildings in a range landscape with a backdrop of tall coniferous and deciduous trees. There are livestock present in the photo and the continuation of hilly landscape is suggested in the background. Image 27 also shows a working building with old pickups and a

backdrop of deciduous trees. The mid-ground is tilled and the suggestion of hilly topography is present in the background be on the trees.

Table 4.4 Factors for the Residential Photo Set

Rural Character Rating	Overall Mean	SD	Alpha Level
<i>Neighborhood</i>	2.47	1.13	0.92
Older structures with various levels of maintenance (3, 5, 6, 7, 10, 18, 23, 28)			
<i>Land Use</i>	3.98	0.97	0.87
Structures that suggest land use oriented living (2, 8, 11, 13, 22, 24, 27)			
<i>Estates</i>	3.29	1.07	0.86
Newer, large homes on large secluded, open lots (1, 4, 9, 14, 17, 21, 25)			
<i>Screened Parcels</i>	2.50	0.93	0.71
Structures on heavily wooded or poorly manicured lots (12, 26)			
Preference Rating	Overall Mean	SD	Alpha Level
<i>Neighborhood</i>	2.85	1.08	0.93
Charming homes with urban-type amenities (3, 5, 10, 18, 20, 26)			
<i>Land Use</i>	3.74	0.91	0.76
Structures that suggest land use oriented living (8, 19, 21, 24, 27)			
<i>Estates</i>	3.33	0.96	0.81
Newer, large homes on large secluded, open lots (1, 9, 14, 17)			
<i>Unmaintained</i>	2.51	0.84	0.73
Residential structures with low visual quality (11, 16)			

The next highest rated factor in the residential photo-set is the “Estates” factor. Images 2, 8, 11, 13, 22, 24, and 27 all strongly associated with this factor. These images show open landscapes or large lots with large, well maintained homes with unique architecture. In most of the images only one structure is visible. In others, there are more than one, but the landscape is more dominant, as in image

4. Independent sample t-tests show no statistically significant difference in how each group rates photos loading to this factor (Table 4.5).

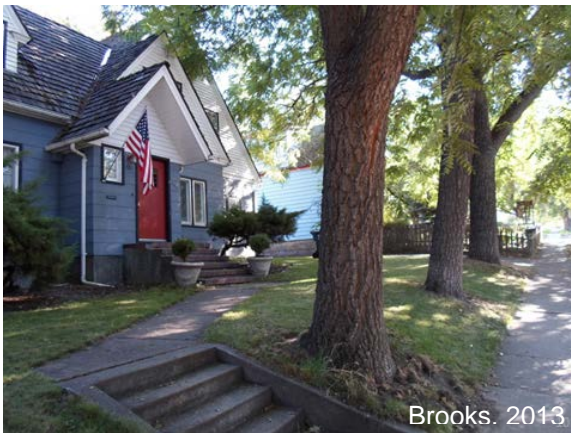


Figure 4.3 Residential # 10 Total Mean = 2.36



Figure 4.4 Residential #23 Total Mean = 2.0

Images loading to the “Neighborhood” factor show small, older homes on small lots in varying degrees of maintenance. They are images 3, 5, 6, 7, 10, 18, 23, and 28. Interestingly, the images that loaded negatively for this factor included larger, suburban looking homes on large lots with similar amounts of vegetation. Unincorporated rural residents rated images loading to this factor as having moderate levels of rural character, while residents of incorporated rural communities rated the images slightly higher-as having high rural character. Independent sample t-tests show statistically significant differences in how each of these groups rates rural character in the images loading to this factor.

The last factor in the rural character rating is “Screened Parcels”. This factor loaded strongly on Images 12 and 26. It has a total mean of 2.50 (Table 4.4). Although there are only two images for this factor, it is clear that closed, screened landscapes generally do not contribute positively to rural character. Each group rated the images loading to this factor as having low rural character. An independent

sample t-test shows no statistically significant difference in how the groups rated the images (Table 4.5).

Residential Preference Factors

Overall, respondents exhibited a strong preference for images of single family homes on large lots, which were loading the *Land Use* factor or the *Estates* factor. The *Land Use* factor image set shows residences and working buildings set in open landscapes that may or may not suggest being cultivated, but are definitely not wild or suburban in character. The overall rating for images loading with the *Land Use* factor was 3.74, which falls in the high “neutral” rating on the preference scale. This suggests that respondents feel there are elements of these images that are rural and elements that are not, but in general the combination of nice homes on large lots would not be unwelcome in rural places. In contrasting the images with those from the *Estate* factor set, there seems to be a preference for cultivated lands over wildland as the dominant land for communities with large lots.

The *Estate* factor images show large homes in a landscape setting that could be wild. These are more wildland-urban interface (WUI) than agriculture, which suggests that lot size is a strongest element in rural character preferences. The overall mean for images loading with this factor is 3.33 (Table 4.4). Again, this is a neutral rating, which suggests that there is some element, or combination of elements, that respondents prefer, but it is not enough to generate a desirable rating in the general population.

Table 4.5 Group Means for Residential Factor Analysis - α indicates difference at 0.05 level

Rural Character Rating	Incorporated Mean	Unincorporated Mean
<i>Neighborhood</i>	3.00 α	2.04 α
<i>Land Use</i>	4.26 α	3.76 α
<i>Estates</i>	3.21	3.34
<i>Screened Parcels</i>	2.47	2.53
Preference Rating	Incorporated Mean	Unincorporated Mean
<i>Neighborhood</i>	3.42 α	2.39 α
<i>Land Use</i>	3.76	3.73
<i>Estates</i>	3.26	3.38
<i>Unmaintained</i>	2.53	2.50

The *Neighborhood* factor also appears in the preferences, but with a low desirable rating (Table 4.4). These images show small, older homes with charming facades. Many of the images show sidewalks, curbs, and gutters in addition to large or mature street trees. The lots are small and the homes are close together, which does not suggest traditional land uses. They are generally well maintained, but the landscape elements do not have a fresh or designed feel as with the *Estate* factor images. Independent sample t-tests reveal statistically significant differences in how unincorporated incorporated groups rate images loading to this factor (Table 4.5). Generally incorporated rural residents consider the neighborhood aesthetic to fall

into the neutral range for preferences while the unincorporated group rated the images loading this factor as undesirable.



Figure 4.5 Residential #27 Total Mean = 4.36



Figure 4.6 Residential #14 Total Mean = 3.5

Only two images loaded to the last factor. These images represent strong associations with the factor, but an overall low preference rating (Table 4.4). The images show suburban type homes with overgrown landscapes that obscure the home. The architecture was ruled out for these images because it is only clearly visible in one image, which suggests that tidiness or overgrowth is the factor respondents were rating in these images. Independent sample t-tests show no statistically significant difference in how each group rated images loading to this factor (Table 4.5).

Commercial Rural Character Factors

Three strong factors loaded with the images of commercial and retail scenes. Table 4.6 shows the total mean for each factor, along with the standard deviation and Cronbach's alpha for reliability. Table 4.7 shows a group means for images loading to each factor. Means notated with an alpha symbol (α), were statistically significant at the 0.05 level.

The first factor loaded to images of traditional “agriculture” type working structures or elements that suggest participation in traditional land uses. One was adaptively reused to accommodate retail, but retained the look of an old dairy barn. The overall mean rating for the images loading was 4.31 (Table 4.6) and independent sample t-tests show that there is no difference between unincorporated and incorporated rural residents (Table 4.7). For these images, the form and function are closely linked and the use of the structures is clearly of an agricultural or livestock nature. Images 30, 37, 38, 39, 40 are all associated strongly with this factor.

The second factor appearing in the analysis loaded to images of various commercial structures in different states of maintenance. Some were adaptively reused for retail uses other than those associated with agriculture and others are poorly maintained “Main Street” buildings. Still others were images of tree lined streets with large sidewalks, which suggest the factor being used to rate the images for rural character was not based on traditional land uses in general and suggests a degree of traffic or visitation that respondents might perceived to work against rural character. The total mean for the images loading with this factor is 2.64 (Table 4.6). The images for this factor are 31, 32, 34, 35, and 36.

A third factor loaded to images 33, 41, 42, and 43 with a total mean of 3.38 (Table 4.6). These images show older structures with lots of character. Two images have hilly or mountainous backgrounds (41 and 42) and Image 33 shows poorly maintained structures along a curbed street. The common element in each of these images is automobile traffic. Each image has at least one vehicle and suggests a

high degree of vehicular traffic. Independent sample t-tests show no statistically significant difference between how each group rated images loading to this factor (Table 4.7).

Table 4.6 Factor Analysis for Commercial Photo Set

Rural Character Rating	Overall Mean	SD	Alpha Level
<i>Land Use</i>	4.32	0.80	0.82
Structures that reflect traditional land uses (30, 37, 38, 39, 40)			
<i>Automobile</i>	3.38	1.12	0.84
Structures that induce an increased use of automobiles (33, 41, 42, 43)			
<i>Non-Land Use</i>	2.64	1.18	0.85
Structures that suggest frequent visitation (31, 32, 34, 35, 36)			
Preference Rating	Overall Mean	SD	Alpha Level
<i>Land Use</i>	3.74	0.91	0.76
Structures that reflect traditional land uses (30, 37, 38, 39, 40)			
<i>Non-Land Use</i>	2.87	1.07	0.85
Structures that suggest frequent visitation (29, 31, 32, 33, 35, 36, 42)			

Commercial Preference Factors

Two factors loaded strongly in the commercial photo set. The first loaded to Images 29, 31, 32, 33, 35, 36, and 42. The total mean was 2.86 (Table 4.6). The images in this factor image set depict structures that are definitively not agricultural in nature. Some are adaptively reused cottage homes and others are of “Main Street” structures in various levels of maintenance. This suggests that the preference factor identified by respondents is one related to the diversity of local economies or non-traditional land uses. The images show offices, retail

establishments, mixed use buildings, and block of well-maintained store fronts. Independent sample t-tests revealed that no statistical difference exists between how groups of unincorporated and incorporated residents rate images loading this factor (Table 4.7).



Figure 4.7 Business #33 Total Mean = 2.42



Figure 4.8 Business #30 Total Mean = 4.5

The second preference factor loaded to Images 30, 37, 38, 39, and 40. The total mean for this factor set was 3.74, which falls in the high “Neutral” range of the preference scale. These images show working structures that may or may not still operate as their original use. Adaptive reuse is common for older structures. Another common element is that each building is standing independent of other buildings and the landscape is clearly visible in the background. This suggests that form, function, and density are important preferences by rural residents. Independent sample t-tests revealed that no statistically significant differences exist between how residents of unincorporated or incorporated settlements rate the images loading this factor (Table 4.7).

Aerial Rural Character Factors

Three factors loaded strongly with the Aerial photo set. Table 4.8 shows the overall mean for images loading to each factor in addition to the standard deviation

and Cronbach's alpha for reliability. Table 4.9 shows each individual group mean. Means notated with an alpha symbol (α) were statistically significant at the 0.05 level.

Table 4.7 Group Means for Commercial Factor Analysis - α indicates difference at 0.05 level

Rural Character Rating	Incorporated Mean	Unincorporated Mean
<i>Land Use</i>	4.44	4.22
<i>Automobile</i>	3.60	3.21
<i>Non-Land Use</i>	3.04	2.32
Preference Rating	Incorporated Mean	Unincorporated Mean
<i>Land Use</i>	3.73	3.76
<i>Non-Land Use</i>	3.23 α	2.58 α

The first loaded to Images 47, 48, 50, 52, 63, 64, and 66 with a total mean of 3.42, which is in the "Moderate" rural character range (Table 4.8). The images in this factor set show small, clustered, high density settlements near areas of high natural character, such as forests, lakes, rivers, or large swaths of cultivated fields, suggesting that respondents were basing rural character ratings on a factor related to the integration of the landscape and built environment, such as wildland urban interface. Independent sample t-tests revealed statistically significant differences in how the unincorporated and incorporated groups rated the images (Table 4.9). On average, incorporated residents consider this factor to contribute more rural character than unincorporated residents.



Figure 4.9 Aerial #50 Total Mean = 2.78



Figure 4.10 Aerial #46 Total Mean = 3.11

The second aerial factor loaded to Images 51, 55, 56, 60, 61, and 68 with a total mean of 4.40 (Table 4.8). This score is in the high rural character range. The images show large lot, loosely geometric settlements with low street complexity. The landscape is the dominant feature whether it is forest, cultivated lands, or a combination of both. Generally the built environment, and landscape are well integrated. Independent sample t-tests show that there is a statistically significant difference in how unincorporated and incorporated residents rate this factor for rural character (Table 4.9). While both groups rated these images as having “high rural character”, the unincorporated rural resident group rated them slightly higher than the unincorporated group, suggesting a strong response to the factor.

The third factor loading to aerial images has a total mean of 3.16 (Table 4.8). It loaded to Images 44, 45, 46, 49, 51, 57, 59, 62, 65, 67, 69, 70, and 71. These images show communities with high degrees of geometry and infrastructure complexity. Generally, these images suggest settlements that are attempting to balance development with natural amenities, but from the aerial perspective still reveal a high degree of engineering involved in created the effect. Independent

sample t-tests revealed that there is no notable difference in how each of the sample groups rated the images based on this factor (Table 4.9).

Table 4.8 Aerial Photo Set Factor Analysis

Rural Character Rating	Overall Mean	SD	Alpha Level
<i>Wildland Urban Interface</i>	3.42	1.06	0.91
Structures that reflect traditional land uses (47, 48, 50, 52, 63, 64, 66)			
<i>Integrated</i>	4.40	0.63	0.84
Settlements well integrated into the landscape (51, 55, 56, 60, 61, 68)			
<i>Engineered</i>	3.16	1.18	0.92
Settlements appear forced into landscape (44, 45, 46, 49, 51, 57, 59, 62, 65, 67, 69, 70, 71)			
Preference Rating	Overall Mean	SD	Alpha Level
<i>Engineered</i>	2.81	1.07	0.92
Settlements appear forced into landscape (44, 46, 48, 49, 51, 57, 59, 62, 65, 66, 67, 71)			
<i>Integrated</i>	3.79	0.89	0.89
Settlements that appear well interfaced with the landscape (45, 53, 54, 55, 56, 60, 61, 68)			
<i>Wildland Urban Interface</i>	3.21	1.00	0.81
Settlements with suburban characteristics in the WUI (47, 52, 63)			

Aerial Preferences Factors

Three factors also loaded for the responses to the preference rating. The first loaded to Images 44, 46, 48, 49, 51, 57, 59, 62, 65, 66, 67, and 71. The total mean was 2.81 suggesting that the images loading with this factor are considered to have low rural character in general (Table 4.8). However, independent sample t-tests indicate that there is a statistically significant difference in how incorporated and unincorporated residents rate the images for rural character (Table 4.9). The images show communities that are very prominent from an aerial perspective. They appear

to be forced into the landscape and tend to have street complexity and geometry that does not blend well with the surrounding landscape. This factor was tagged *Engineered*. While both groups generally rated the images as having low rural character, the incorporated group rated the images were in moderate rural character range (Table 4.9).

Table 4.9 Group Means for Aerial Photo Sets - α indicates difference at 0.05 level

Rural Character Rating	Incorporated Mean	Unincorporated Mean
<i>Engineered</i>	3.37	3.00
<i>Integrated</i>	4.55 α	4.28 α
<i>Wildland Urban Interface</i>	3.85 α	3.08 α
Preference Rating	Incorporated Mean	Unincorporated Mean
<i>Engineered</i>	3.01 α	2.68 α
<i>Integrated</i>	3.58 α	3.96 α
<i>Wildland Urban Interface</i>	3.80 α	2.75 α

The second factor, *Integrated*, loaded to images. 45, 53, 54, 55, 56, 60, 61, and 68 with a total mean of 3.79 (Table 4.8). This mean falls into the high “neutral” range. The images loading with this factor show small communities with low infrastructure complexity well integrated into the landscape. There are no abrupt changes in land cover and no identifiable geometry in street pattern. The lot sizes are of medium to low density character. Independent sample t-tests revealed statistically significant differences in how each group (unincorporated and

incorporated residence) rate images (Table 4.9). On average, unincorporated rural residents rated the images loading with this factor slightly higher (very rural) than incorporated residents (moderately rural).

Images 47, 52, and 63 loaded a third factor, *Wildland Urban Interface*, with a total mean of 3.21 (Table 4.8). These images depict high-density compact communities surrounded by high quality open space and natural amenities. Independent sample t-tests revealed that there also statistically significant differences between the unincorporated and incorporated groups when rating images loading with this factor (Table 4.9). On average the incorporated residential group rated the images in the high “neutral” range, while the unincorporated group rate images in the mid to high “undesirable” range.



Figure 4.12 Aerial #52 Total Mean = 3.36



Figure 4.11 Aerial #45 Total Mean = 4.11

Chapter 5 Discussion

Introduction

This chapter will discuss the results from the previous chapter through the contextual lens of key issues – density zoning, property rights, and rural character. These issues were selected because they represent key challenges for designers of rural communities and points of divergence between incorporated and unincorporated rural communities.

Density Zoning

The use of density as a planning tool is widely used in United States for the preservation of open space, a commonly cited attribute of rural character. As a result, the issue of lot size has been pulled into the realm of community design as a primary challenge for balancing land conversion with preservation of agricultural and wildlands. In incorporated communities is not uncommon to find a wide range of available and legally zoned lot sizes. Part of the reason for this is a need to balance the demands for various lot sizes, housing quality, and the goal of reducing the cost of providing services, such as water and sewer, with the need for protecting large amounts of economically significant land reserved for traditional land uses.

Infrastructure costs are a master variable in the design of new subdivisions because they are generally the responsibility of the developer, who then passes the cost on to home buyers. When homes are near one another, as with high density residential neighborhoods, the cost of installing and maintaining infrastructure can be decreased because it can be spread between more residences in a small area. This is a powerful incentive for developers to subdivide a parcel into as many

individual lots as possible. This is generally considered positive for the majority of homebuyers because it can result in more affordable options in diverse locations. In very rural areas, community water and sewer systems may not be an option, which makes lots harder to sell or prevents those with less financial resources from considering them because drilling wells and installing septic systems can double or triple the costs of building a home in a rural area. When this occurs, many subdivision applications require that the proposed lots are at least big enough so that a domestic well can be dug at a required minimum distance from both the primary septic system and the location of a proposed replacement system. In many Idaho counties, this is at least 50 feet. In order for this to pass, the agency issuing septic permits must test the soil to make sure that the soils are deep enough to house the system and that there is an appropriate infiltration rate to accommodate the size of the tank and the drain field. This places restrictions on how small a lot can be, which also may create a market for housing available only to those with access to finances that allow them to purchase “privacy” or “isolation” or to those willing to participate in a traditional land use that can help pay for the land. In this sense, these quality of life values are a commodity and most available in unincorporated lands.

This gives insight that may help to explain why rural character ratings in the photo-questionnaire were higher for incorporated residents in all but the images that suggested large lots being used for traditional land uses, like farming. As a lifestyle, this is not usually available to residents of incorporated towns within city

jurisdictional boundaries. Despite this, residents of both groups listed traditional land uses as an important attribute of rural character during the 3CM exercise.

As a tool for preserving rural character, density zoning assumes that everyone in a zoning district is participating in the land use it is attempting to protect, but this is the exception. It is rare for a land use oriented zoning district to be composed entirely of large parcels. Most large lot zones have mixes of lot sizes that have either been there from before zoning began in Idaho or resulted from the incremental parcelization related to inheritance or from residential subdivision, which is a much faster process and can change the visual character or fragment a landscape in less than a year. The direct and indirect impacts of residential land conversion and exurban development on ecosystem services are well documented (An, Brown, Nassauer, & Low, 2010; Carruthers & Vias, 2005; Esparza & Carruthers, 2000; Hansen et al., 2005; Larsen, Sorenson, McDermott, Long, & Post, 2007; Nielsen-Pincus et al., 2010; Platt, 2006; Theobald, 2004). In addition, there are also quality of life reductions associated with demographic and physical changes to rural areas. The 3CM results suggest that attributes like safety, less traffic congestion, and high environmental quality are important associations with rural character, but each is negatively impacted by rural subdivision through exurban sprawl. Qualitative review of the factors loading in the street level photo sets support the 3CM findings as images with high degrees of automobile infrastructure received notably lower rural character ratings by both groups. This occurred, specifically for the unincorporated group, when images suggest a high degree of human impact. It follows that the planning tools used to protect open space, which can include

working lands, are important, but not effective enough on their own because they are not strong policy tools for deterring rural subdivision – an artifact of the culture to expand property rights rather than protect them. Without additional tools to protect cultivated or working landscapes, new rural subdivisions unintentionally encourage more of the same type of development. When county guiding documents make the preservation of rural character a goal, it seems it can only be attained with careful growth management.

However, some counties require that developers provide community water and sewer systems for their developments. This effectively means that if a developer has the means, the consumer demand, and the biophysical character of the parcel permits, a subdivision could be located almost anywhere. On the positive side, this allows developments to be located away from prime agricultural land. The downside, however, is that the degree of engineering needed to locate in areas of more variable topography will likely result in a noticeable lack of affordable housing. A side effect of this type of housing market is that only those solvent enough to absorb the costs passed on from the developer will be able to buy in these types of developments.

On the Rathdrum Prairie in North Idaho, the local Health District has worked out an agreement with the Kootenai County to cooperate for the sake of the sole source aquifer under the prairie, which provides some of the cleanest drinking water in the world to over 500,000 residents in Washington and Idaho. The deal resulted in a policy change to limit the number of septic tanks on the Prairie. As it stands, there can only be 1 septic tank per 5 acres – commonly referred to as the “1 in 5 Rule”.

This rule is considered by the Health District and the County to be a successful strategy that limits the density of development on the Prairie to minimize human impacts to the Spokane Valley – Rathdrum Prairie Aquifer. There are other benefits, including habitat and open space protection and the facilitation of traditional land uses for the area. These benefits help to reinforce notions of place in Kootenai County.

From a human dimensions perspective, less development on the prairie is good for business. Kootenai County's latest comprehensive plan proposes innovative and controversial strategies to direct people into population centers rather than allowing unbridled development on the prairies, valleys, and mountainsides in the name of supporting and growing the local tourism and recreation economy. The plan proposed matching the level of amenities provided in a settlement to the distance it is from an area providing more services. The furthest settlements have very limited services and have requirements for community water and sewer systems. There is virtually no retail allowed unless it supports the dominant land use in the area. Settlements that are closer to cities that provide services will be allowed to have more amenities like general stores or mixed use business centers with more retail, connections to public transportation, and smaller lot sizes that help to create the density necessary to support the provision of these services. Settlements nearest to incorporated cities will have the most services available to encourage people who want or need public transportation and access to shopping and entertainment amenities to locate there rather than out in the county. This strategy may not sound controversial, but in a rapidly urbanizing county like Kootenai, it has

created a heated dialogue between developers, realtors, community advocates, utility purveyors, and elected officials over property rights and the role of the county in the provision of services.



Figure 5.1 Aerial #56 Total Mean of 4.64



Figure 5.2 Aerial #67 Total Mean 2.1

The results of the 3CM exercise suggests that open space and low density are important elements of rural character. This is supported by rural character ratings that trended down in aerial images showing high street complexity. Image 56 (Figure 5.1) received the highest rural character rating from respondents. Unincorporated residents rated it as 4.50, but incorporated rural residents rated it as 4.81, which is the highest rating given to any image in the aerial photo set. Image 67 (Figure 5.2), as a contrast, received the lowest rural character rating by both groups – 1.85 from unincorporated rural residents and 2.31 from incorporated rural residents. Despite the high degree of interface with the surrounding forest, the density and street pattern of the subdivision in Image 67, which may qualify as a cluster development, is simply not perceived to be rural by respondents. Ratings of similar images suggest that the abrupt change in land uses may also be a contributing factor.

Similarly, the lowest total mean rating for a residential image was Image 18 (Figure 5.3), which shows older homes in a classic suburban subdivision. It received a 1.65 from unincorporated rural residents and a 2.25 from incorporated rural residents. Image 24 received the highest total mean rating, but as in individual image it was ranked similarly to other images showing rural land uses – 4.4 from unincorporated residents and 4.5 from incorporated rural residents. This image shows working buildings as part of a farmstead complex in an open field with variable topography and vegetation in the background.



Figure 5.3 Residential #18 Total Mean 1.92



Figure 5.4 Residential #24 Total Mean 4.44

These images show the variability in what rural residential areas can look like when mixed lot sizes are present in a community. Image 18 was taken in an outlying area of Moscow, Idaho and was directly across the street from a large, open lot with working structures and a homestead that is similar to what is found in Image 24, which was taken in Harvard, Idaho – a historic, unincorporated community. Coincidentally, Image 24 is adjacent to small lot development in Harvard. The disparity in the highest and lowest images is in stark contrast to reality. Density zoning is not a reliable tool for the preservation of rural character. To be effective, at

more than the parcel scale, it must be used with other tools and an understanding of sociopolitical climates of rural places.

Property Rights

Since the Nation was founded, property owners have been trying to clearly define their rights as landholders. We still, as a society, do not have a clear understanding of where some property rights begin and end. For example, if someone purchases a home on the side of a mountain overlooking a wooded valley, does the property owner have a right to that view? The answer to this question is fairly complicated. As a private property owner, an individual, the only guaranteed way to protect the viewshed is to purchase the land that might eventually be developed to the point where it blocks it. However, as a community, if the view is a cultural landscape, there is precedent that views can be protected. For example, the city of Portland, Oregon limits the height of buildings to prevent views of Mt. Hood from being blocked. Mt. Hood is the most prominent peak in a ridge that is very clearly and unanimously a cultural landscape. In unincorporated places, however, cultural landscapes are rarely so well protected when they are not part of private lands. As important as they may be, they are just as vulnerable as the rural character they help to create. This leads to developing new ways to organize communities that respect heritage and culture, but do so at a site scale.

One of the primary issues in rural areas, for designers, is that it can be very difficult to figure out where to focus design interventions. Rural communities often do not have the luxury of large amounts of community property like parks or commons. What they do have is a lot of private property bordered by thin strips of public right-

of-ways and easements. In a sense, this is a type of cultural landscape. In contrast, urban areas often have a much higher ratio of intentional community property to private property. Community property in an urban settlement is likely to be quite a bit more developed, as well, with curbs, gutters, sidewalks, street trees, tree lawns and a whole host of other design interventions used to create a sense of community through common visual elements that unify. This is also often the case for rural subdivisions. Community property in unincorporated rural settlements, however, is not often considered to be an opportunity for design interventions such as these. Part of the reason for this relates to the disparate philosophies concerning property rights and community property between urban and rural settings.

On private land, rural character is often the result of how a landowner uses their land. A developer may subdivide, build modern homes, and stock the subdivision with community amenities, but each lot eventually gets sold off and the responsibility of maintaining the community property is transferred to an HOA, which enforces CC&Rs to protect the community character of the subdivision everyone bought into. In this case, character (rural or otherwise) is institutionalized through well-guarded community property.

For a farmer, on the other hand, rural character is a passive product. Efforts can certainly be made to influence and support it, but ultimately, it does not exist as distinct entity, beyond private property boundaries. If two adjacent landowners decide to use the land in different ways, rural character will be affected. The aerial images factor analysis findings suggest that abrupt changes in land cover, land use, or community complexity are detrimental to general ideas of rural character.

Triangulating Rural Character

The Conceptual Content Cognitive Mapping exercise revealed that incorporated and unincorporated rural residents use similar depth of knowledge and experience to define the abstract concept of rural character. These themes are similar to those uncovered in other research on rural character and place (Cantrill, Thompson, Garrett, & Rochester, 2007; Tilt et al., 2007). Ten common major themes (Table 4.1) were observed in the attributes listed by respondents in each group, which suggests that rural residents tend to agree about the basic parameters to describe rural character. Most of the major themes have a relatively low occurrence in each group, but the occurrence of concepts related to each meta-theme occurred frequently enough that the mean for respondent is greater than one. Interestingly, concepts related to the Physical Change meta-theme are the least frequently mentioned by members of both groups. The Catalysts of Change meta-theme was also weakly represented by the mean between groups. It is worth noting even though there is no significant difference between the groups regarding this meta-theme. Incorporated rural residents listed an average of one concept for this meta-theme, while unincorporated rural residents listed an average of three. Concepts listed by the unincorporated residential group that were sorted into Catalysts of Change included “aging population”, “increasing use of cell phones”, and “people moving in and wanting to divide up farm ground for housing”. Incorporated rural residential group listed similar concepts for this meta-theme-“sometimes newcomers try to change the community to their preference”, “outsiders or newcomers have more time than locals do, to try to influence”, and “lack of budgets”. These concepts

suggest that respondents in each group are aware of how changes in demographics, in migration, and available funding for projects can quickly influence rural character. These concepts also suggest that respondents are aware of issues related to political and social power and influence as vectors of change in rural places. It should be noted, however, that only 5% of respondents in the incorporated group listed attributes sorted into this meta-theme, and 17% of unincorporated rural residents listed attributes sorted as Catalysts of Change. This might suggest that unincorporated residents are more aware of change because it is perhaps more noticeable in rural places or because they have less potential capacity to influence it than incorporated residents.

The themes of “Low Density” and “Isolated” were each very frequently referred to by each group using only one or two closely related concepts. The concepts were listed by 10% and 15%, respectively, by the incorporated group and 29% and 25% respectively by the unincorporated group. Again, no statistically significant difference was found between the percentages of each group listing concepts for these meta-themes, but this may be an artifact of the sample size or a flaw relating to the use of the Conceptual Content Cognitive Mapping activity in an online survey.

Three meta-themes received notably high response means and were listed by a very high percentage of respondents in each group. Description, Experience, and Social Capital (See Table 4.1) concepts were listed more frequently and by more respondents than any other meta-theme. The Description meta-theme related to identifying where respondents thought rural character could be found. These

concepts included descriptions of landscapes and land uses perceived to be near places with rural character or having rural character themselves. “Open space”, “surrounded by nature”, “fields”, and “barns” were commonly listed attributes.

Respondents also frequently listed visual elements they expected to find in rural places such as distinct buildings, dirt roads, small schools, and farm equipment. The mean number of concepts per respondent sorted to this meta-theme was 4.30 for the incorporated group and 4.45 for the unincorporated group and the percentage of respondents in each group listing concepts for this theme was 95% and 96%, respectively - making it the most frequently used meta-theme in each group.

The Experience meta-theme is related to the experiences and quality of life perceptions respondents believed are common to places with high rural character. “Farming and agriculture”, “see the stars at night”, “it feels peaceful”, and “outdoor recreation” represent concepts sorted into this meta-theme. These concepts center on the activities and experiences that respondents associate with landscapes and land uses with high rural character. They describe the experiences respondents might have based on choices they make about how to live in their ideal rural character landscape. 50% of respondents in the incorporated group listed concepts sorted to this theme with a mean of 3.27 concepts per respondent. For the unincorporated group, 67% of respondents listed experience concepts with a mean of 2.21 concepts per respondent in this group.

The Social Capital meta-theme was largely composed of concepts relating to interpersonal relationships with neighbors and visitors to areas with high rural

character. Generally, respondents listed concepts that idealize interactions between people - presumably when people respect the status quo of the community. However, several respondents listed concepts related to how sense of community might be threatened by people moving into a rural area, particularly “urbans”. When positive, the concepts were most frequently describing relationships between neighbors and the sense of community that respondents associated with places of high rural character. “Friendly, close knit”, “we help each other”, “know and look out for your neighbors”, and “strong community identification” were common sub themes sorted into this meta-theme. Just as respondents were easily able to describe where rural character can be found and what they can do there, they were also able to easily identify who they can find in places with high rural character. 62% of respondents in the incorporated group listed concepts for this theme with a mean of 5.06 concepts per respondent. 61% of respondents in the unincorporated group listed concepts related to Social Capital and had a mean of 4.94 concepts per respondent.

The three dominant meta-themes of Description, Experience, and Social Capital can be thought of as way finding references to places with high rural character. Respondents used combinations of these meta-themes to triangulate rural character and develop a three-dimensional portrait based on their personal and social experiences. A closer look at the concepts listed for each reveals insights about the perceived scale and context associated with rural character. For example, concepts sorted to the Description theme seemed to set boundaries on the scale of rural character by describing where in space rural character can be found. These

were frequently related to land uses and recreation activities that require a lot of space or land. In terms of scale, the concepts clearly show that open space, whether it is natural or cultivated in nature, is an important element in places with high rural character. How people choose to experience these landscapes and what they perceive to be appropriate activities varied similarly in the concepts listed in the Experience meta-theme. These concepts ranged from participating in land uses, like farming, ranching and logging to recreation, like hunting, fishing and hiking. Respondents also frequently listed concepts related to uniquely rural experiences like the smells and sounds of nature, being able to see the stars at night, and seeing wildlife. Quality-of-life concepts were also frequently listed in sorted into the Experience meta-theme. These concepts related to the quality of the environment, like clean air and water, and therapeutic qualities, like peace and quiet. Each sub theme provides insight into scale, just as with the physical descriptions. However, they also provide insight into context because they are based on choices individuals make about what activities and the types of experiences they perceive to be common to places with high rural character. For instance, a farmer may enjoy the landscape, but his livelihood depends on how he works the land. There is visual and experiential context inherent to participating in a traditional land use. The types of structures, the materials, and the availability of goods and services can all be fairly accurately intuited from knowing how a resident lives in and experiences landscape. Additionally, this knowledge can be used to draw conclusions about the type of community, the spatial arrangement and visual quality, someone might live in. More

information can be drawn from how an individual describes the relationships he or she has with neighbors on a personal and community level.

Scale and Context in Rural Character

Since rural residents reveal clues to the scale and context associated with high rural character in the descriptions of the physical landscape, their individual experiences and preferences for activities, and the relationships they have with other people to describe places with rural character, this information can be used to build a simple explanatory model for how rural communities might look as a result of the decisions rural residents make about how they want to live in an experience the land. Concepts for the Description meta-theme are most closely associated with ideas of scale. Respondents use concepts from a wide range of scales to describe places with rural character-wilderness on the large end and gravel roads at a small scale. Additionally, concepts for this theme fall into one of two categories-participating in the dominant land use or experiencing the landscape. In terms of scale, a quick association can be drawn based on which category a resident falls into. For example, if the dominant land use is agriculture and a resident participates in that land-use, assumptions can be made about the amount of land a resident may have. In this example, scale is dependent on land-use. If a resident does not participate in the dominant land use, he or she may not have a need for a large parcel. This is an example of scale being independent of the land use. The basic understanding of this association between land-use participation and parcel size provides basic information about the spatial arrangement of communities, too. Similarly, contextual information can be drawn from decisions residents make about

how they want to experience were they live in the landscape. Again, an association can be made about how a community might look based on whether or not a resident participates in the dominant land use. If the dominant land use is ranching and a resident chooses to participate, regardless of scale, the decision still provides information about the types of structures, building materials, and goods and services that are likely to be common to similar communities. In this example, context is dependent upon the landscape. Context can also be independent of the landscape or land-use when a resident chooses nontraditional alternatives for living in an experiencing the land. This decision can result in structures, building materials, and infrastructures that are not rooted in vernacular or local aesthetics.

Through the discussions of density zoning, private property, and rural character, a relational hierarchy can be seen where landscape and land-uses can be thought of as the grandparents of rural character. The relationship between landscape and land-use has an undeniable influence on the amount of land people choose to hold. As such, scale is an offspring of the relationship between landscape and land-use. Context is also influenced by the relationship between landscape and land-use. How a resident chooses to experience the land influences preferences that affect the visual quality and availability of goods and services in a community. In this sense, scale and context are master variables for rural character and, subsequently, community design. They are inextricably linked through decisions residents make about preferences for amenities and aesthetics. If landscape and land use are the grandparents of rural character and scale and context are their offspring, a simple model can be used to describe how communities might have looked based on

information residential decisions relating to land use participation that influence the spatial arrangement, visual quality, vernacular, and amenity availability of unincorporated rural communities.

Chapter 6 Conclusions and Implications

Conclusion

Just as there is more than one type of rural, there is more than one valid idea of rural character. The de facto assumption that rural character is generally the same in all rural places appears to be an artifact of the inability of people to clearly and discreetly define it – a phenomenon common to unincorporated and incorporated rural residents as described by the 3CM results. Even as rural residents use common attributes and concepts to describe rural character, there are significant differences between unincorporated and incorporated rural residents when visually identifying. The factors where significant differences between the groups occur represent a divergence of opinions that seem to be related to the place specific opportunities of rural residents to participate in traditional land uses and the disparate ability to regulate variables that can influence rural character – wherein some land uses are not as available to incorporated rural residents, but they have more local control to plan, fund, and implement place-based rural character interventions. For unincorporated rural communities, there is a pronounced absence of legal tools for local community influence, which seems to result in a narrower visual definition of rural character that is closely linked to traditional land uses. The many types of rural communities are products of decisions about how people living in rural communities choose to live in it. Combining the cognitive and visual perceptions generated through the two methodologies, suggests that land use participation choices can provide important scale and context information that predicts the wide variety of unincorporated rural communities in terms of spatial arrangement and visual quality – including rural character.

Relating scale and context to rural character has important implications for planners and designers of rural places. It demonstrates that rural areas are patchworks of differing preferences for how to live in and experience the land that have tremendous influence over rural character. The data gathered from this research suggests that rural character may be too subjective to generalize for all rural communities, but at a place scale, understanding the variables influencing rural character can be quite simple.

Modeling Unincorporated Rural Communities

In genetics, Punnett Squares are used to demonstrate the rudimentary concept of genotypic inheritance probability in offspring when the alleles for a trait of each parent are known. The color of peas is often used to teach junior high or high school students the basic principles of dominant and recessive traits. This tool can also be used to make predictions about how communities look based on residential level decisions regarding land use participation that influence scale and context.

Figure 6.1 shows how decisions related to context and scale can explain some of the variability seen in the visual quality and spatial arrangement of rural communities. The combination of dependent and independent scale and context decisions about how residents choose to experience the land predict four archetypes for rural communities. These archetypes are basic but fairly accurate analogs for the most commonly seen rural communities in Idaho. Identifying them quickly provides information to planners and designers about potential parameters for interventions that inherently support local, place-based rural character.

Figure 6.1 Scale and Context Punnett Square

		Scale	
		Independent (I)	Dependent (D)
Context	Independent (I)	II	ID
	Dependent (D)	DI	DD

The first archetype (II), results from decisions by residents not to participate in the dominant land use and to preferences for amenities that are not necessarily linked with the economic base of the community. These decisions result in a “Non-nostalgic Rural” community. In this type of community, cultural landscapes are not bound to land use or working landscapes. Subsequently, land-use is not a dominant influence on culture. This combination results in scale and context being independent of traditional land uses and lifestyles. Non-nostalgic communities are the “wildcards” of the community archetypes because any scale or context could be used. In general, cultural landscapes are not strongly influential on rural character because residents are often only able to find superficial shared meaning. In this type of community, it may be common to find that cultural landscapes are manufactured or artifacts. A manufactured cultural landscape is one that is used to seed ideas of place, but is only loosely founded in history or heritage. Developers often use manufactured cultural landscapes to market “place” to prospective buyers by alluding to traditional uses, history, or landforms when naming the subdivision or its

streets. The strategy leverages the desire of homebuyers to be connected to a place through communal meaning without actually having direct cultural connections to the place. Cultural landscapes can become artifacts when a community begins to move away from its traditional heritage. The linkages between local economy, culture, and landscape can become degraded as communities diversify. Economic diversity and in-migration slowly gentrify the community away from traditional lifestyles. Because there are no economic or social imperatives obligating preferences for land use oriented scale and context, Non-nostalgic communities can vary greatly in rural character. The most obvious type of Non-nostalgic rural community is the high density subdivision, which is generally considered to be the vector of sprawl.

The second rural community archetype is the “Public Rural” community. This type of community can result when aesthetic and economic context is influenced strongly land-use, but scale is not. Resort towns, river or lake communities, skiing, villages, and hobby farms are examples of Public rural communities. Scale is driven by the local land market, which results in resident sorting themselves according to their preference for lot size or ability to finance the purchase. Generally, Public rural communities are as near as possible to the amenities or desired land-use. Since context is dependent upon land-use or natural amenities in the landscape, these communities often look appropriate for the area. For example, in areas with dominant agricultural land uses, hobby farms on small lots will still have contextually appropriate structures and materials. Lake communities will have architecture that falls into the range of appropriate structures for the lake living lifestyle. This type of community is one that is fairly accessible to people looking for particular experiences

with the landscape, so they are rather rare as unincorporated communities go. The motivations to incorporate are strong because of the desire to protect the experience or access to the landscape amenity or lifestyle.

The third archetype, “Private Rural” communities, result when scale is inspired by the dominant land use, but context is independent. These communities rarely have physical cultural landscapes. Rather, these communities are based on shared values and desires for specific aspects of quality of life, like independents or privacy. How residents use the land is rarely scrutinized because residents are often too spread out to be bothered. Examples of this type of community abound in Idaho. In Nez Perce County, for instance, an active gravel pit is located adjacent to a community of custom homes on large lots. Even when blasting occurs in the gravel pit, is very rare for the County to receive complaints despite the close proximity of these two land uses that are considered to be incompatible by traditional zoning. Private property rights are highly prized in these types of communities and the ability to exclude others from experiencing the land is a community value. The 3CM theme of Isolated describes the rural character associated with this type of community. The concepts sorted to this theme all suggest a strong desire for independence, self-sufficiency, privacy, and personal freedom that is require distance between neighbors.

The fourth archetype of rural communities is the “Nostalgic Rural” community. These communities are composed of collections of private property upon which landowners have chosen to participate in the dominant land use in traditional ways. As a result, lot size scales up or down depending upon the need by the landowner to

participate and context references the built environment and the need for land uses support businesses. In this type of community, cultural landscapes are usually synonymous with the working landscape and how landowners use their land is a matter of cultural importance. Local culture develops from highly localized experiences with the land where communities often display a preference for one type of activity over another. For instance, communities are often mostly ranching or mostly agriculture. Within each type, there are also options for several different kinds. For instance, there are examples of horse communities, cattle communities, wheat farmers, and pea farmers. Because scale is dependent upon land-use, these communities tend to be fairly dispersed, as in agricultural communities, or fairly compact, as with mining or logging communities. Contextually, the structure and composition of the built environment results from the needs associated with participating in the land use. In farming and ranching communities, structures are often organized into complexes that include residences. This tends to create a noticeable pattern of open space punctuated with farmsteads at regular intervals with easy access to roads.

The factor analysis of the photo questionnaire responses provided some support for this model, particularly with street-level images where the relatively high amount of information was available to the respondent. This is most clearly demonstrated in the rural character rating of the residential photo set. Each of the four factors derived from the responses corresponds well with a community archetype. The highest scores by both groups were seen for images that show or suggest the alignment of land-use and lifestyle (Nostalgic Rural). The next highest

ratings were those that showed scale dependent communities that may or may not be context dependent. Both of these trends correspond to the 3CM themes relating to using landscape scale features and land uses to describe where rural should be found. The amount of information available in each image varied, so the data that can be linked to the mixed archetypes is confounded, but suggested. The images wherein there was not enough information for the respondent to make determinations about land-use received the lowest ratings. These tended to be platted communities that appeared to have been heavily engineered into the landscape and with densities inconsistent with participation in the dominant land use tradition.

These factors suggest that respondents are able to gather clues about scale and context based on the degree of platting or subdivision shown in an image - especially when context is also independent of land-use. However, in mixed communities where scale appears to be borderline, but context is determined to be relatively dependent upon land-use (Private Rural), ratings for rural character between each group diverged slightly as the unincorporated group tended to use a higher rural character rating than the incorporated group. Additional research that investigates the specific preferences of unincorporated rural residents is needed to develop further support for this model, however.

Design Considerations

“The professional territory of design, architecture, even aesthetics and taste, has succeeded in creating for itself a world of its own, separate and distinct from other forces, remote and untouchable to any lay person who dares to comment – though we all do so in casual conversation (if we are sure no architect is present).”

This is not merely sad, it is environmentally damaging and only serves to reinforce the 'danse macabre' between architects, planners, elected members, lay people, and developers which has characterized the last 30 years of so called 'aesthetic control'" (Bishop, 1994, p. 259).

Bishop's statement about the privatization of rural design is no doubt directed at context and scale independent developments that market rural character as a "style" meant to be static and universally identifiable. This is rather like chain restaurants that re-create the same atmosphere and experience for every location. The only way to successfully execute this, however, is to regulate private property rights. Turning rural character into a commodity only serves to create a market for it, however. When people can buy it, or at least a passable analog of it, and they are willing to forgo property rights to sustain it, they are affirming their rights as property owners to execute ultimate control over rural character. The potential influence on traditional, unincorporated rural communities could result in a political shift from property rights expansions to, the more urban paradigm, of property rights protections.

Examining the clichéd principle of "form follows function" is no longer sufficient to describe how rural communities look and feel. As a more qualifiable alternative, Dewey Thorbeck, proposes changing the precept to allow for more consideration of scale and context – "form follows function, climate, and place" (Thorbeck, 2012). In planning, this may seem redundant because regulatory regimes are generally products of the codification of local preferences and culture, which are an extension of the democratic process attempting to reconcile the interface of human and natural systems. These are often intentionally vague, however, as to

allow property owners to take risks in the name of private property rights – such as building in a floodplain – despite centuries of case law and practical experience warning them against it. This places the obligation of rural community design decision-making on the shoulders of land owners and developers, rather than local bodies elected to represent residents of unincorporated lands. These bodies, however, are acutely aware of the risks associated with supporting policy actions that might incite claims of government overreach. The de facto forms created through the enforcement of local ordinances are thereby assumed and trusted to be reliably appropriate in scale and context because they are products of this codified local culture and the wide berth given to property owners in the name of private property rights expansions. However, the argument could be made that the clear avoidance of actions that cast critical eyes on decision-makers have resulted in a phenomenon of government under-reach and has resulted in a decision-making culture that recreates the wheel with each new land use decision for fear inciting claims of property takings – even when the law and the civil case law that test it are clear about where public and private matters begin and end.

In rural design, including climate and place as qualifiers for form reserves a place for the critical consideration of natural and social science, which contribute insight and history into community design not to supplant local experiential knowledge, but to supplement it. In the past, this process was unavailable and, perhaps, inappropriate because of the more or less feral quality of unincorporated rural community development. That is to say that a large portion of rural communities are the result of private land splits rather than formal platting

processes. These “wild” communities are easy to identify because they are usually composed of collections of homesteads on large, adjacent parcels with complexes of working structures or their remnants. The homesteads are usually situated to leverage access to common infrastructure, such as a county or farm to market roads. Street complexity is low as private drives, rather than low volume roads, are more common. Platted communities, on the other hand, have more infrastructure complexity, smaller lots, and evidence of local commercial activity. They also have more intentional space for social interactions like community buildings, parks, and other types of community property.

Comprehensive Planning for Rural Character

In Idaho’s Local Land Use Planning Act, cities and counties are mandated to include elements for community design in their comprehensive plans. The language requiring this element is decisive and requires “analysis”, but does not give any direction for developing contextual intention for its use. “Community Design -- An analysis of needs for governing landscaping, building design, tree planting, signs, and suggested patterns and standards for community design, development, and beautification” (State of Idaho Legislature, 1975, sec. 67–6508(m)). This often confounds county governments because unincorporated rural communities are not, at least for the purposes of governance, more than the sum of their parts. The culture, then, becomes relying on this element to describe goals and objectives that aim to preserve the character of unincorporated lands as a whole by “encouraging”, rather than mandating, because any decisions affecting unincorporated rural communities are, in fact, placing any burdens generated by the decision on private

land owners that do not have authority to levy taxes to offset costs for projects that benefit the “community”.

Rural planners, as a matter of the nature of the profession, have limited capacity for power and influence over community design decisions, which are ultimately up to local boards and commissions. Even though police power, reserved for the states and their agents by the 10th Amendment, grants a considerable amount of power to elected bodies to protect the health, safety, and welfare of citizens – a necessary and important responsibility for local governments - elected officials and decision-making bodies are often faced with making decisions that pit private property rights against community health, safety, and welfare. These decisions can become very complex and important when unincorporated rural communities, with preferences for low government involvement, struggle to clearly define themselves as distinct communities with limited investment in community property or simply as a collection of private property pursuing community interests .

There may be many reasons for this trend in Idaho’s county comprehensive plans, but it should be noted that the staff of many of Idaho’s county planning offices is very small and in some instances consists of one part-time employee or a clerk that has assumed the responsibilities usually reserved for dedicated planners. It should also be noted that the requirements for each element, as described in the Local Land Use Planning Act, are described in general terms with no strong language requiring critical analysis of data.

The directive of many county comprehensive plans to consider the importance and conservation of rural character in land use decision-making, at least

in Idaho, is about private property rights, which are difficult to define and must be carefully sidled. This directs planners away from process-oriented community building toward more general enforcement of policies, which may have been written and adopted to support the conservation or preservation or rural quality of life, but treats all property owners with the same prescription. In many cases, the same policies used to protect rural quality of life and rural character are the same used by developers to assert their right to redefine them or ignore them all together because rural quality of life and rural character are only easy to describe in general terms. In other instances, the policies designed to protect rural places are designed with loopholes that allow the development of new residential units with densities traditionally found in urban settlements. This effectively creates a wide range of settlements that can and do consider themselves to be rural communities simply because they are located in unincorporated places. This, at least as a remnant of county policy, makes them identical to traditional unincorporated rural communities that have endured for a century or more. They may have the same or similar legal form, but functionally, they are often quite different as a matter of design.

In the context of county governance, at least in many counties in Idaho, the culture is to create wide lines in the sand between private and public interests. This is clearly evident in the stance that many counties take regarding the providence of services for county residents. This culture, however, is changing as the values and common worldviews of rural communities become more diverse through in migration, demographic change, and jurisdictional volatility necessitated by power

struggles at the city/county interface and the creation of politically and socially organized rural subdivisions.

Jurisdictional Complications

In the last decade, cities in several Idaho counties have reduced their Areas of City impact. The reasons for these changes vary, but they are all indicators of the differences between the roles of counties and cities. Kootenai County, Nez Perce County, and Blaine County have experienced this change. In Kootenai County, the need for cities to reign in their influence over surrounding unincorporated land was a voluntary decision supported by the county government. In Nez Perce and Blaine Counties, the negotiations to reduce city ACIs were introduced by the county governments attempting to reassert jurisdictional representation over county residents who found themselves in a policy purgatory between city and county zoning and comprehensive planning.

Human Scale and Context

For the purposes of creating a culture and language in rural design that separates it from other design paradigms, it is helpful to define its scale and context. To do that, however, it becomes necessary to develop a process for determining what is and is not rural. This is easier said than done because identifying rural character is more than visual. It is also cultural and highly subjective. What one person quickly identifies as rural, another may struggle to definitively qualify, as with rural subdivisions. Even when it can be agreed upon, there are cultural mores that allow people to rate one community as more rural than another. Still, at a deeper socio-cultural level, rural characteristics of a community may be stylized into an

organizing tool so people within a community can quickly sort people into or out of their social network even if they do not live in close proximity to one another. This is often seen in unincorporated communities as a vestige of productive uses of private land. Land that supports cultivation for agriculture tends to create agricultural communities, while rangelands tend to facilitate livestock communities. Even within each industry, it is common to find cattle communities forming social networks that do not include, or loosely include, horse or sheep communities, which often have their own. This phenomenon appears to be product of common experiences with the land as they yield and support common worldviews and values. This often translates into political cultures that are more homogeneous than those found in definitively urban settlements.

Economic Legacies

Local economies in rural places are generally much less diverse and often less complex as those found in more urban settlements. In historic logging communities, for example, there may only be a handful of stable employers and a complement of businesses providing goods and services to local residents. In agricultural communities, there may only be one primary industry supported by the independent farmers running their own businesses. In contrast, the complexity of urban economies is one of its defining characteristics - wherein rural communities you may find an entire community built to support one company's claim to natural resources, in less rural communities, you find municipal governments providing the motivation for community development.

In some instances, the development of a town may have been instigated by one company to provide housing for workers. Eventually, the structures were liquidated and bought by individuals. In other instances, common infrastructure facilitated community building. What began as a small train depot became a distinct and stable community over the course of decades.

Built Environment

Much research has been attempted to identify the specific elements of the built and natural environment that contribute rural character to a place that people, commonly, recognize as rural, but this endeavor has proven more difficult than it would seem. Along with the physical attributes people use to recognize rural places, there also seem to be human dimensions, such as economy and culture, that different people can use to create subjective rubrics for identifying rural character. The degree to which the elements of a place are used to identify it as rural change with who is doing the defining, but there seem to be some variables in this process upon which many different kinds of people rely to draw conclusions about what makes a place rural. These variables include combinations of physical and cognitive cues such as the amount and quality of open space, the size and nature of local economies, the visual quality and proximity of residences to one another, and the degree and type of engineering used to thread private and community property together.

Social/Cultural Capital

In terms of place-making processes, defining rural character can become even more difficult. Some communities are more engaged than others in building

and maintaining social and cultural capital. Residents of an unincorporated settlement may use cultural capital, such as a perceived common experience with the land, to define its boundaries, such as when the primary land use changes from livestock to agriculture. To those outside of the community it may seem that livestock is just as rural as agricultural land uses, but to the people living in a community, how the land is cultivated and used becomes at least part of the bright line quickly identifying people within the community. Even within land use cultures, cattle communities may see themselves as distinct from horse communities as they do agriculture. Recognizing these differences as defining attributes provides communities with a place of common values from which to unite if the need arises.

In other communities, there is a physical delineation, such as the wildland-urban interface or the mountain range that bounds a valley housing a community. In others, yet, common social circles are the defining element, as when attending the same church, belonging to the same club, or having long local family legacies. Still, others may use residential proximity or density, such as when clusters of smaller lot residences help neighbors build community networks.

For designers and planners, it can be useful to edit the definition of rural character to be less about how a community recognizes itself and more about identifying and creating spaces that facilitate the unique place-based processes of community building. This creates a new set of challenges because jurisdictional authority for community property is often not local. Parks, for instance, are the responsibility of the county and rights of way are often managed by highway districts

or road departments that operate with high degrees of autonomy within the county government.

Designing with Rural Community Archetypes

Understanding where rural communities began, in terms of scale and context, has valuable implications for planners and designers because it allows them to trace the historic influences on rural character. It is, yet, another level of information to eliminate unknowns for rural professionals when they attempt to address community needs through policy and design interventions. Additional information about parcelization and land use change can be introduced to broaden an understanding of the spatial and contextual influences acting on a place over its history. This information provides planners and designers with important narratives about the spatial and temporal changes that helped to shape a community and seeded its rural character.

Each type of community archetype sets its own parameters for appropriate interventions. For instance, proposing sidewalks in a Nostalgic Rural community with an agricultural land use influence would be contextually inappropriate because of the scale issues and lack of community property with which to connect people. However, in a logging community where the community scale is more compact and there are more community destinations, a sidewalk is more likely to contribute to social capital. This is an obvious example, but it may not always be so easy to match intent with scale and context.

The small hamlet of Harvard, Idaho is one such example. Originally, it was platted as a railroad depot to support the booming timber industry in the region. As

such, the lots were small and there was a demand for goods and services that supported a small business district. The construction of Highway 6 eventually allowed people the opportunity for more choice with goods and services and the general store and other commercial businesses eventually had to close. With the influence of timber land uses waning, opportunities to shift toward a new land use presented themselves and agriculture eventually became the dominant land use. The result is a combination of influences from two different but legitimate land uses. One inducing a compact scale with more diverse economic opportunities and the other pulling the community toward a dispersed spatial arrangement with a new land use inspired visual and economic context. There is also an argument that the slow development of a local tourism economy has played an important role in the adaptive reuse of part of the community.

If a planner or designer were asked to develop interventions that preserve this community's rural character, they would have to answer important questions about how to develop programming for a community that has remnants of two distinct identities and hints of opportunities for a third. The most important insights would come from the desires of the community, but understanding the relationship between scale, context, community, and landscape that is demonstrated by the rural community archetypes can guide the planner or designer toward matching the policy or design solutions to the unique identity and goals of the place.

Further Research

Additional research on scale and context in unincorporated rural communities is needed to develop a more complex model of the variables that contribute to rural

character. The use of annual rates of parcelization and average size can help to trace, more accurately, the influence of scale and context on rural character over time. The potential to further explore rural character exists in the investigation of perception differences between residents of platted and unplatted unincorporated communities. In this vein, the degree to which rural subdivisions and traditional, unincorporated platted communities differ in terms of rural character may also lead to design insights that may help to soften the interface of high density rural subdivisions and the landscape.

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Appendix A

Images on Pages:

1. 123-130 are used with permission from the photographers (Bradley & Kearney, 1989)
2. 165,188, 191, and 192 are used with permission from the photography (Bradley, 1999)
3. 166-187, 189-190 (Google Earth, 2014)
4. 131-164 (Brooks, 2013)

1. Stand up and be counted. Tell us your experience as one of Idaho...

Your opinion matters. Idaho's rural population is changing fast. Right now, about 30% of our state's residents live in rural communities. That's more than the national average of 20%. Idaho has a large rural presence, but many of our rural communities exist unprotected from the changes brought on by rapid urbanization, like subdivisions built outside of incorporated cities. **Our rural communities are vital to our state economy and culture, which makes them and the people who live in them very important. Help us understand if the character of these historic communities is at risk.**

You are very important!

By taking the time to complete this survey, you are helping University of Idaho researchers [tell your story](#) and develop a better understanding of what makes rural communities special and unique. This is vital to developing strategies that [protect our historic unincorporated communities *without compromising the independent culture and heritage of their residents.*](#)

[Understanding how you, as a rural residents, define rural character](#) will help planners and designers develop ways to [protect the quality of life and experience of rural places in Idaho](#) in a way that [respects their residents, heritage, and culture.](#)

Help us by putting in your two cents.

The survey has 2 main parts, which can be done separately at your convenience. Each is approximately 15 minutes. If you want to take the two sections separately, fill out the matching question on this page and do the section of your choosing. When you return to complete the survey, just fill out the matching question again and do the section you skipped the last time.

Your responses are confidential and will only be seen by the researchers.

to do it over the phone or in person, please call or email. Jase Brooks is happy to answer any of your questions - jbrooks@uidaho.edu or 208-874-2495

1. I'm interested in what rural character means personally to you. Please think of a place that you would describe as having rural character. What does it look like? What does it feel like? What makes this place "stand out" in terms of rural character? In your mind, what attributes would describe rural character? Please list the attributes that come to mind when you think about rural character.

Use one box for each. For the next questions, you will use the box number rather than the word you type for this question. If you need some inspiration, please see the next question.

Use only the spaces you need. If you need more boxes, continue on Question 2.

1.	<input type="text"/>
2.	<input type="text"/>
3.	<input type="text"/>
4.	<input type="text"/>
5.	<input type="text"/>
6.	<input type="text"/>
7.	<input type="text"/>
8.	<input type="text"/>
9.	<input type="text"/>
10.	<input type="text"/>
11.	<input type="text"/>
12.	<input type="text"/>
13.	<input type="text"/>
14.	<input type="text"/>
15.	<input type="text"/>
16.	<input type="text"/>
17.	<input type="text"/>
18.	<input type="text"/>
19.	<input type="text"/>
20.	<input type="text"/>

2. If you find yourself struggling to describe attributes of rural character, here are some things to think about. If you don't need any help, skip this question.

a. Open Space/Nature

b. Community or Family

c. Natural resource industries (timber harvesting, mining) or agriculture (farming or ranching)

d. Threats to rural character

Please use the spaces below for the attributes that come to mind. You do not need to go back to Question 1. We'll combine Questions 1 and 2 next. Use only the spaces you need.

21.	<input type="text"/>
22.	<input type="text"/>
23.	<input type="text"/>
24.	<input type="text"/>
25.	<input type="text"/>
26.	<input type="text"/>
27.	<input type="text"/>
28.	<input type="text"/>
29.	<input type="text"/>
30.	<input type="text"/>
31.	<input type="text"/>
32.	<input type="text"/>
33.	<input type="text"/>
34.	<input type="text"/>
35.	<input type="text"/>
36.	<input type="text"/>
37.	<input type="text"/>
38.	<input type="text"/>
39.	<input type="text"/>
40.	<input type="text"/>

3. Please take a moment to organize or group your attributes from Questions 1 and 2 (if you used it) in any way you see fit. Use the box number instead of writing the attributes again. For example, if you feel that attributes 2,3,7, and 20 go together, please use the boxes below to group them (Example: 2,3,7,20). Use a different box for each grouping. Use only as many grouping boxes as you need.

Group 1	<input type="text"/>
Group 2	<input type="text"/>
Group 3	<input type="text"/>
Group 4	<input type="text"/>
Group 5	<input type="text"/>
Group 6	<input type="text"/>
Group 7	<input type="text"/>
Group 8	<input type="text"/>
Group 9	<input type="text"/>
Group 10	<input type="text"/>

4. Please look at the groups you made in Question 3. Give a label to each group you made and comment on why you put those particular attributes in one group. For example, maybe you organized Group 1 because the attributes all have to do with something you don't like about places with lots of rural character. Maybe you think they don't have enough to do for children. For the box labeled "Group 1" you might type "Children - there aren't enough activities to keep kids entertained." There are no wrong answers.

Group 1	<input type="text"/>
Group 2	<input type="text"/>
Group 3	<input type="text"/>
Group 4	<input type="text"/>
Group 5	<input type="text"/>
Group 6	<input type="text"/>
Group 7	<input type="text"/>
Group 8	<input type="text"/>
Group 9	<input type="text"/>
Group 10	<input type="text"/>

5. This is the last of this type of question. Please look at the groups you made in Question 4. Please rank them in order of importance to you. For instance, if your Group 1 is most important to you mark it as 1. Please do not rank two groups with the same rank. Use only the number of groups that you have for Question 4.

	1 (Most Important)	2	3	4	5	6	7	8	9	10
Group 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group 10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. SECTION 1b

Only a few more question left in Section 1.

***1. Do you live in an incorporated city or out in the county?**

- I live within an incorporated city's boundary line
- I live out in the county in an unincorporated place

***2. Do you rent or own?**

- Rent
- Own

***3. If you live in a community with a name, please provide the name. If not, please provide your county name. In the next box, put name of the town you buy your groceries in.**

Community name or County

Where is your grocery store?

***4. Do you work in a community other than the one you live in?**

- Yes
- No

***5. How many miles do you drive to work?**

Distance to your job in miles

***6. How many years have you lived in your community?**

Length of residency in years

***7. Which is closest to your opinion of how your local government (city or county) treats your community or rural place?**

- It is not doing enough to protect or improve the quality of life in my community
- Too much interference in my community
- I have no opinion about this

***8. Which is closest to your opinion of how your local government (city or county) treats your private property rights?**

- It needs to do more to protect my property rights
- It needs to be less involved with how I use my property
- I have no opinion about this

***9. What type of residential development do you think your community needs to keep it healthy?**

- None
- More small lot residential
- More large lot residential
- A mix of residential lot sizes
- A large subdivision
- A small subdivision
- I don't know

***10. Which is closest to your opinion of retail/commercial business development needs in your community or rural place? This refers to business that is not related to agriculture or natural resources.**

- I don't want any in my community
- We don't need any in my community
- Retail/Commercial businesses don't belong in communities like mine
- More home businesses without store fronts
- More small businesses with store fronts
- More convenience businesses so I don't have to drive far for things like groceries or gas.
- More businesses that create jobs for locals
- More businesses that bring tourists through my community.
- More businesses that attract skilled people to move into my community
- I have no opinion about this

***11. Which is closest to your opinion of tourism in or near your community?**

- I wish we had more things to offer tourists
- I wish we didn't have things that attract tourists
- I like that they stop to enjoy what we have to offer
- They don't affect me so I don't mind
- They are good for our small businesses, but I'm glad when they leave
- Tourists threaten my way of life
- I have no opinion about this

***12. Would you like to move on to Section 2?**

4. Section 2 - The Photo-Questionnaire

This section goes very fast.

You will view a series of images of various types of buildings with two rating scales below each. **Please rate each image according to the amount of rural character you think it has by selecting from the first scale.**

Then rate it according to your preference for it using the second scale. If you don't like it at all, rate it as Very Undesirable. If you like it a lot, rate it as Very Desirable.



***1. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***2. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***3. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***4. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***5. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***6. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***7. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***8. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***9. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***10. How would you feel about the above image if it were in your community?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***11. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***12. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***13. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***14. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***15. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***16. How would you feel about the above image if it were in your community?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***17. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***18. How would you feel about the above image if it were in your community?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***19. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***20. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***21. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***22. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5.



*** 1. How much rural character does the image above have?**

Very Low Low Moderate High Very High

*** 2. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***3. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***4. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***5. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***6. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***7. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***8. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***9. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***10. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***11. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***12. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***13. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***14. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***15. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***16. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***17. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***18. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***19. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***20. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***21. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***22. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***23. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***24. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***25. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***26. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***27. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***28. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***29. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***30. How would you feel about the above image if it were in your community?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***31. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***32. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***33. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***34. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable

***35. What is one thing you like about your community?**

***36. If you could do one relatively easy thing to improve the rural character of your community, what would it be?**

***37. How would you rank the general rural character of your own community?**

Very Low Low Moderate High Very High

6. Business/Commercial

Please rate these business structures for their rural character and your preference for them as you have done with the previous images.



***1. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***2. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***3. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***4. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***5. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***6. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***7. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***8. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***9. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***10. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***11. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***12. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***13. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***14. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***15. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***16. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable

7.



***1. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***2. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***3. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***4. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***5. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***6. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***7. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***8. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***9. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***10. How would you feel about the above image if it were in your community?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***11. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***12. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable



***13. How much rural character does the image above have?**

Very Low Low Moderate High Very High

***14. How would you feel about the above image if it were in your community?**

Very Undesirable Undesirable Neutral Desirable Very Desirable

8. What patterns have the most rural character to you?

If you are not able to respond right away, it is possible the images are still loading. Please allow them a few seconds to catch up.

What do you see when you look at these images?

Rate them just as you have for the previous images. First for rural character and then for your preference for them.



***1. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***2. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***3. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***4. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*** 5. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 6. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 7. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 8. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*** 9. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 10. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***11. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***12. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***13. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***14. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 15. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 16. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 17. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 18. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***19. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***20. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 21. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 22. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 23. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 24. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 25. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 26. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 27. How much rural character does the image above have?**

Very Low Low Moderate High Very High

*** 28. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable Undesirable Neutral Desirable Very Desirable

9. Aerial Community Images

Blank area for notes or additional information.



*** 1. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 2. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***3. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***4. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 5. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 6. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*** 7. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 8. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*** 9. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 10. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



***11. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***12. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 13. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 14. What is your preference for living in a community like the one represented in the image above?**

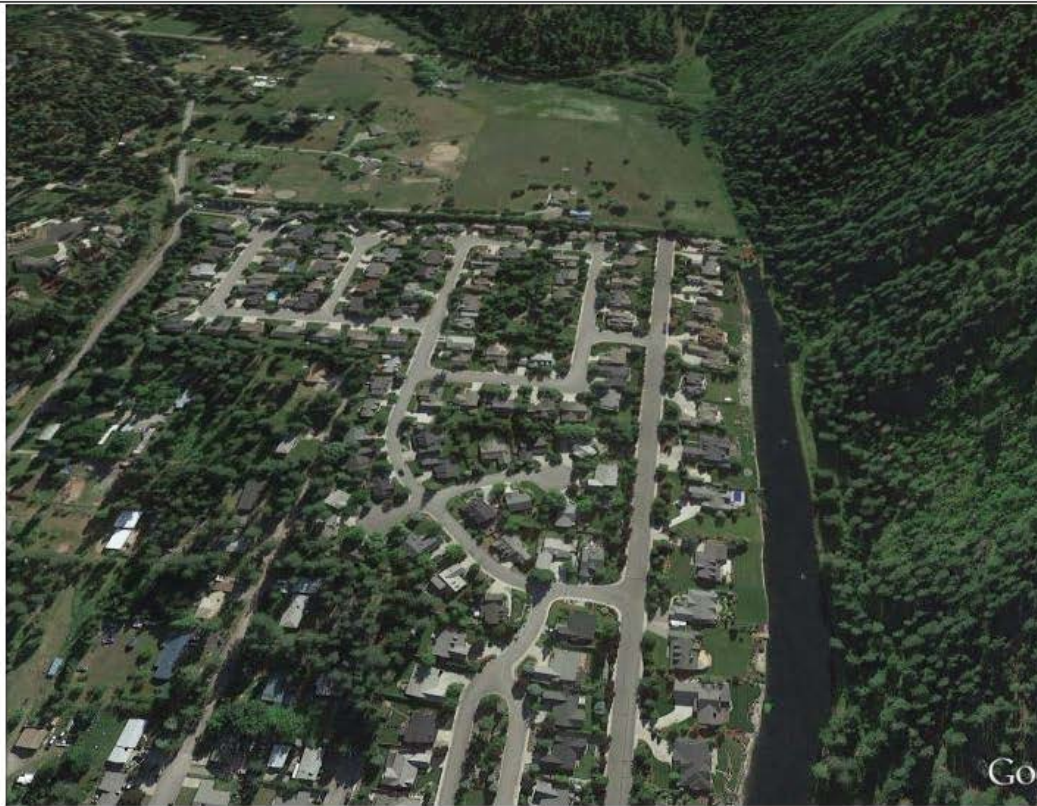
Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 15. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 16. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***17. How much rural character does the image above have?**

Very Low	Low	Moderate	High	Very High
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***18. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable	Undesirable	Neutral	Desirable	Very Desirable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



***19. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

***20. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 21. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 22. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 23. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 24. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 25. How much rural character does the image above have?**

Very Low

Low

Moderate

High

Very High

*** 26. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable

Undesirable

Neutral

Desirable

Very Desirable



*** 27. How much rural character does the image above have?**

Very Low Low Moderate High Very High

*** 28. What is your preference for living in a community like the one represented in the image above?**

Very Undesirable Undesirable Neutral Desirable Very Desirable

*** 29. What size of populations do you think is too big for an unincorporated rural community?**

*** 30. How important is lot size to rural character?**

Not Important Somewhat Important neutral Important Very Important

*** 31. What is the smallest lot size (Acres) you consider to be appropriate for rural residential lots in a community like yours?**

*** 32. Do you see a mix of lot size options in a rural community as a good thing or something to be concerned about?**

- It's good
- I don't think it matters
- It concerns me

Appendix B

Photo-Questionnaire Responses for Rural Character

RespondentID	Unincorp_Resident	Own_Home	Community_Name	Commute_Work	Commute_miles	Residence Time	Res_1	Res_2	Res_3	Res_4	Res_5	Res_6	Res_7	Res_8	Res_9	Res_0	Res_1	Res_1	Res_1	Res_1	Res_1	Res_1
3459776529	1	1	Idaho County	1	17	2	1	3	1	1	1	1	1	2	1	1	2	1	2	2	2	2
3509083543	1	1	Owyhee	1	43	3	2	5	2	1	1	1	1	4	2	1	4	2	3	3	2	2
3474383773	1	1	Bonner	1	16	3	1	3	3	3	2	2	2	4	2	3	4	3	4	3	4	3
3470957883	1	1	Reynolds Creek	2	13	9	2	4	2	1	2	2	2	4	2	2	3	2	4	3	2	2
348883544	1	1	Jerome County	2	3	9	4	4	1	2	1	2	1	4	4	1	2	3	4	4	3	4
3468842052	1	1	Bonneville	1	17	10	4	1	2	1	1	1	1	3	4	1	2	3	2	3	3	2
3509019449	1	2	Southwick	2	0	12	3	5	4	2	3	3	1	5	4	1	5	4	4	5	3	3
3509086390	1	1	Marsing, Owyhee	2	10	15	3	4	4	2	3	2	1	4	3	2	3	3	5	3	2	3
3538569461	1	1	LaBelle	2	0	16	5	5	2	5	2	4	2	5	5	2	5	4	5	5	5	5
3468689900	1	1	Elk City	2	1	17	3	4	3	3	3	3	2	4	2	3	4	3	4	4	4	4
3590131093	1	1	Jerome	2	1	20	3	3	2	3	1	2	1	3	3	1	3	3	1	3	3	3
3509074381	1	1	Marsing, Owyhee County	2	2	21	2	3	5	3	5	3	5	5	2	6	3	2	1	4	3	3
3538435777	1	1	Twin Falls	2	4	29	3	5	2	1	2	2	2	4	4	2	3	3	3	4	3	3
3468849090	1	1	Ada County	1	20	30	4	5	2	2	1	2	1	5	4	1	4	3	4	4	4	4
3470398418	1	1	Canyon	1	20	35	2	2	1	2	2	3	3	3	2	1	2	3	1	3	2	3
3476140006	1	1	Nez Perce County	2	0	35	2	5	1	1	1	1	1	3	5	1	2	1	2	3	1	4
3538555664	1	1	Lapwai area	2	2	38	3	4	4	4	3	4	3	4	4	4	3	4	4	4	4	4
3509083185	1	1	Owyhee County	2	0	45	2	5	5	2	4	2	4	4	2	2	4	3	4	3	4	4
3479900772	1	1	southwick	2	0	58	3	4	2	2	1	3	3	4	4	2	2	4	4	4	3	4
3552879763	1	1	Sweet	2	0	70	4	4	2	3	2	3	2	5	4	2	5	3	3	4	3	2
3540703528	2	2	Challis	2	1	1	4	4	4	3	3	3	2	4	3	3	3	4	4	3	3	3
3536818245	2	2	King county	2	1	1	3	4	3	5	3	5	4	5	5	4	4	4	4	4	3	4
3488849441	2	2	moscow	2	1	2	2	5	4	2	4	3	4	5	3	4	5	3	5	3	5	4
3538594349	2	2	Moscow	2	1	3	4	4	3	2	3	3	2	4	3	3	4	3	3	3	3	3
3538779564	2	1	Hailey	2	1	3	3	4	4	3	4	4	2	5	2	2	5	2	3	4	4	3
3540811920	2	1	Challis	2	1	8	2	4	3	2	3	4	2	4	2	2	2	3	4	2	2	3
3511925177	2	1	Latah	2	3	9	2	4	3	3	3	3	3	5	2	2	4	2	4	3	4	3
3470082319	2	1	Kuna	2	7	14	3	4	2	2	2	2	2	5	4	2	3	3	5	3	3	3
3488859901	2	1	Kuna	2	0	18	3	5	4	3	4	3	4	4	2	3	5	3	5	5	4	4
3477459629	2	1	Hailey	2	1	19	2	4	3	2	4	3	3	5	2	3	5	3	4	3	3	4
3521812319	2	1	Peek, Nez Perce County	2	0	22	1	3	4	1	5	3	4	5	1	4	4	3	3	4	3	4
3479229560	2	1	Kuna	2	26	22	4	4	3	4	4	4	2	4	4	2	4	3	4	4	3	4
3542378238	2	1	Challis, Idaho	2	0	32	2	4	4	1	2	2	2	3	1	2	3	2	3	3	3	3
3542364223	2	1	Rigby, Idaho	2	12	58	2	4	4	3	3	3	4	5	3	4	4	2	5	4	2	4
3552752480	2	1	Power				2	5	5	3	5	3	4	4	3	4	4	3	4	3	5	3
34688373432	2	2	Orofino				1	4	4	2	4	3	3	3	3	3	4	2	4	4	4	4

Res_1 7	Res_1 8	Res_1 9	Res_2 0	Res_2 1	Res_2 2	Res_2 3	Res_2 4	Res_2 5	Res_2 6	Res_2 7	Res_2 8	Bus_2 9	Bus_3 0	Bus_3 1	Bus_3 2	Bus_3 3	Bus_3 4	Bus_3 5	Bus_3 6	Bus_3 7	Bus_3 8	Bus_3 9	Bus_4 0	Bus_4 1	Bus_4 2	Bus_4 3	Air_4 4	Air_4 5	Air_4 6	Air_4 7	Air_4 8			
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3	2	4	1	4	5	1	5	4	2	5	4	2	5	3	3	2	4	4	5	5	3	5	5	3	3	3	4	4	3	3	3			

What is the smallest lot size (Acres) you consider to be appropriate for rural residential lots in a community like yours? - Open-Ended Response	Do you see a mix of lot size options in a rural community as a good thing or something to be concerned about?
	It's good
3	It's good
0.25	It's good
It depends on the area. Closer to an incorporated city would have smaller lots, the farther away from a city, larger lots may be better.	It's good
5	It's good
2	It's good
2	I don't think it matters
3	It's good
1	It's good
0.5	It's good
1	It's good
1	I don't think it matters
3	It's good
5	It concerns me
5	It concerns me
25	It's good
0.50	It's good
20	It's good
10	It's good
5	It's good
1	I don't think it matters
5	It's good
0.07	It's good
1	It's good
0.1	It's good
1	It's good
20	It concerns me
0.5	It's good
1	It's good
0.25	It's good
1	It's good
0.25	It's good
5	I don't think it matters
In town smaller, but surrounding sub divisions 1 acre.	It's good
0.25	I don't think it matters
0.5	It's good

Conceptual Content Cognitive Mapping Responses

RespondentID

3459776529	sparsely populated	gardening	hunting	fishing	trapping
3474383773	Sparse Houses	Mosaic of Wild Areas and Naturalized areas	Cows	Old machinery	Lumber mills
3509083543	Friendly and generous.	Laid-back pace of life.	Honest and reliable.	Quiet.	Calm.
3468883544	livestock	crop production			
3470957883	Morally conservative	Large expanses of open space	Sense of community	More private property freedoms	Less regulations
3468842052	large farms	large ranches	forest service land	scenic	friendly / neighbors
3509019449	Friendly	Agriculture base	Civic-minded	Trusting	
3509088390	caring	fields	wide open spaces	community	schools
3538569451	trees	smaller roads	no sidewalks or street lights		
3468669800	quiet	surrounded by nature	many recreational opportunities	kids can play safely throughout the area	somewhat remote
3468948877	You see wildlife on a daily basis.	It is dark outside on a new moon.	You can see the stars at night.	You can smell sagebrush (or other natural vegetation) when you go outside.	You know your neighbors.
3560131093	no or little available mass transit	community theme and identity	knowing your neighbor	people willing to workin with you and discuss how to make things better	churches
3509074381	natural	agricultural	beautiful		
3538435777	animals	laid back	open space	little city noise	
3468849090	Irrigation	Less congestion	Produce stands		
3553895266	Little concern with style. Little interest in world affairs.	Focus on simple essentials for living. Conversation over coffee.	Busy in summer with travelers.	Increasing use of cell phones.	Local newspaper, local events of interest
3470388418	limited development	mostly large lot zoning 20-40 acres	local farm to market roadway system	agricultural produce stands allowed	farm equipment moving freely about
3476140006	independent	animals			
3538555664	interactive government with local priorities	plenty of playground and social activity space	large displays or decor with local cultural themes	neat and tidy roads, streets, sidewalks and parking lots	
3471095660	agriculture	forest/rivers/	QUIET recreation	protected vistas	non-corporate use
3538924596	may hear the sounds of nature	It feels peaceful	slow paced peaceful with sounds of nature	sagebrush steppe/grazing cattle peaceful,	High mountains and valleys recreation familygreen, pine smell flowing creeks

RespondentID

3509083185	Helping others	Friendly	Quiet	Lots of room	Farmland
3479900772	love the scenery	farming	cattle and other livestock are a pleasure to watch	space to make gardens	freedom to expand if one wants to
3552879763	lots of volunteerism	neighborhood watch	slower pace	more interaction among neighbors	What the neighborhood is doing by listening
3540703528	minimilistic	living off the land	hunting	fishing	barter/trade
3536818245	things that highlight the state and this country	not a lot of big corporations	love the small town feel	farms	parks
3468849441	friendly	native vegetation	NO non-native lawn	bikeable	mix of agricultural products
3538779564	plowed fields	community	individualism	conservative politics	cozy
3538594349	outdoor living	outdoor recreation	wildlife	supportive	independant
3540611920	Small town	No traffic	small schools	Lots of wildlife	Good place for kids to grow up
3511925177	Quiet	Remote	Peaceful	No traffic	Water
3470082319					
3468865901	Fairfield	Arco	Sandpoint	Salmon	Hailey
3477459629	fences	small towns surrounded by agriculture	no strip malls	no big signs	no big buildings or parking lots
3479229560	Green space	Farms	Mom and Pop type stores	Simple	Rustic
3521812319	Minimal regulations	Lack of public transportation	Lack of shopping opportunities	Lack of law enforcement	
3551426233	Less infrastructure developped	agricultural	impoverished	Open space	Less ambitious
3542378238	Low traffic	Peace and quiet	Feeling of open space	Nearness of countryside	Access to country, including forest, river, lakes
3542364223	Good neighbors	Quality of fresh air	Clean water		
3538622352	neighbor watching over neighbor				
3538569436	Lively mainstreet	Cleanliness	Personable to strangers and outsiders	Treat everybody the same/no preferential treatment	Live by the rules of the community
3508808727	Few restrictions	Isolated, underpopulated, room to expand			
3470926968	family clusters	mix of farms and ranches	junk cars and equipment (not good)	Big signs over driveways--Western style.	open irrigation ditches

RespondentID

3459776529	farming	ranching	logging		
3474383773					
3509083543	Hard working.	Strong.	Industrious.	Moral.	Rational.
3468883544					
3470957883	Limited cell service	Limited employment	Aging population	Lower education	Clean air
3468842052	city lot size greater than two acres	natural resources			
3509019449					
3509088390	waves	smiles	hello	no chain restaurants	mom and pop stores
3538569451					
3468669800	distant from hospitals	limited medical care	everyone has life flight	everybody knows each other	there is a sense of community
3468948877	You rely on neighbors to help you, not the government.	You offer help to your neighbor.	You don't need to lock your doors.	You can piss off your front porch.	
3560131093	FISHING & HUNTING	hiking and biking			
3509074381					
3538435777					
3468849090					
3553895266	High interest in hunting game in fall season.	High interest in fishing during summer.	Farming has changed radically towards hay crops. Few foreign workers now.	Schools suffering and shrinking from lack of State-wide financial support.	Conservative cast to voting. Few visits by politicians.
3470388418	ag industrial support industries in close proximity within 10 miles				
3476140006					
3538555664					
3471095660	mom & pop small retail operations	strong community identification	clean water & air	absence of man made structures: cell towers, etc.	lack of concentrated resources: small operations
3538924596	rivers rafting fishing family adventure tourism				

RespondentID

3509083185	Nature	Generations			
3479900772					
3552879763	Close to nature	Know your mail person	close to large useable open space	more environmental understanding	
3540703528	independant	handy	willing to help others for nothing in return	outdoorsy	wilderness
3536818245					
3468849441	original architecture	limited parking lots	wild' places near town	locally-owned!!	gravel roads
3538779564	pick up trucks	visionary thinkers	miles of fence lines	middle of everywhere	middle of nowhere
3538594349	agriculture	mountains	lack of budgets		
3540611920	Gardens everywhere	Transparency in government	Lack of choices for services and goods	Lack of skilled employment	
3511925177	Historic Buildings				
3470082319					
3468865901	Bellvue				
3477459629	small or gravel roads				
3479229560	Gardening	Community Events	Family	Children School Sports are highlighted	
3521812319					
3551426233	Less oppportunity	Less educational imperative			
3542378238	We know our neighbors	We help each other	We are like a family, we fight among ourselves, but join together for adverse circumstances	Children benefit from safe, calm, connected community	Children benefit from hard work
3542364223					
3538622352					
3538569436	Proximity to mountains	Outdoor activities	Family	Recreation	
3508808727					
3470926968	easy access to rivers, streams and creeks				

RespondentID

3459776529					
3474383773					
3509083543	Law abiding.	Lasting values.	Children free to play.	Children safer.	
3468883544					
3470957883	Recreation opportunities	Blighted areas	Rundown cities	Friendly people	Slower pace of life
3468842052					
3509019449					
3509088390					
3538569451					
3468669800	people pitch in to improve the community	land management agencies work with local organizations	you know your neighbor by his vehicle	there are no malls within 50 - 100 miles	the store is a general store with food, parts, etc.
3468948877					
3560131093					
3509074381					
3538435777					
3468849090					
3553895266	Increased interest in television and video tapes.	Local public library provides computers and email connections.	Few local people have travelled widely in the nation.	Local churches have shrinking memberships.	Young women are beginning to handle public service jobs.
3470388418					
3476140006					
3538555664					
3471095660	sustainable	human impact reduced			
3538924596					

RespondentID

3509083185					
3479900772					
3552879763					
3540703528	lots of space between towns	reusable instead of disposable attitude towards things			
3536818245					
3468849441	picket fence	split beam fence	victory gardens	access to waterways	big old trees
3538779564	middle america	family values	traditions	Big country	John Wayne
3538594349					
3540611920					
3511925177					
3470082319					
3468865901					
3477459629					
3479229560					
3521812319					
3551426233					
3542378238	Children benefit from outdoor lifestyle	Education could be better	We feel accepted, for the most part, by each other	We feel we are often not heard on the state and national level	We feel our social values are often not acceptable to the wider population
3542364223					
3538622352					
3538569436					
3508808727					
3470926968					

RespondentID

3459776529					
3474383773			dirt roads	Can I hunt out my back door with a rifle.	Did an out of townner but the property and post it no trespassing
3509083543			Farmland	Orchards	Timber lands
3468883544					
3470957883	Small town festivals	Community auctions			
3468842052					
3509019449					
3509088390					
3538569451					
3468669800	jobs based on surrounding natural resources	Excellent and dedicated EMT's	neighbors look out for each other	elderly get a hand from community members	Threats: urbans move in and want unavailable services
3468948877					
3560131093			open space with agriculture	community and family values	natural resources of the snake river canyon
3509074381			Community-Centered	Wildlife	Livestock
3538435777			agriculture	farming operations	
3468849090					
3553895266					
3470388418					
3476140006					
3538555664					
3471095660					
3538924596					

RespondentID

3509083185					
3479900772					
3552879763					
3540703528					
3536818245					
3468849441	city park	unique houses	front porches	garages out of view	street trees
3538779564	belt buckles	Miles and miles	123	19, 18, 17, 9, 11,	5, 6, 7, 8, 10, 15, 16
3538594349					
3540611920					
3511925177			no freeways	far from a City	parks
3470082319					
3468865901			agriculture	sawmill/timber - Kiln (Fairfield - now gone)	mineral development
3477459629					
3479229560			Parks	Golf Course	Rivers/lakes/creeks
3521812319					
3551426233					
3542378238	We feel our political values are not valued in the wide opopulation	Our county is 97% federal, and the neighboring county (Lemhi) is 96% federal	Sometimes newcomers try to change the community to their preference	Often we hold two jobs to make it	Outsiders or newcomers have more time than locals do, to try to influence
3542364223					
3538622352			friendly	concerned over each other	small schools
3538569436					
3508808727					
3470926968					

RespondentID

3459776529					
3474383773	Can I walk along the river bottom and fish without caring whose property it is.				
3509083543	Watersheds	Rivers and streams	Open spaces	Unstructured spaces	Organized
3468883544					
3470957883					
3468842052					
3509019449					
3509088390					
3538569451					
3468669800	want more shopping options	fuel prices are higher	urbans are not neighborly	rudeness increases	look down on the poorer community members
3468948877					
3560131093	hunting & fishin	hiking	communtiy theme with Idaho Historical farm and ranch musem	threat would be urbanization	people moving in and wanting to divide up farm ground for housing
3509074381	Farming	Tractors	Fields	Sage Brush	Friendly
3538435777					
3468849090					
3553895266					
3470388418					
3476140006					
3538555664					
3471095660					
3538924596					

RespondentID

3509083185					
3479900772					
3552879763					
3540703528					
3536818245					
3468849441	community pavilion	community p-patch	sustainable agriculture	windmills	solar panels
3538779564	20, 14, 13				
3538594349					
3540611920					
3511925177					
3470082319					
3468865901	open space	railroad station	Main Street	Brick store fronts with rooms above	Granaries
3477459629					
3479229560	Heritage	Events	farming	ranching	hunting
3521812319					
3551426233					
3542378238	Sometimes outsiders or newcomers lack respect for rural people and their intelligence or education level	Jobs are important, but can be difficult in a resource based economy	Rural people often have an independent spirit	People with an independent spirit often want to own their own businesses	Operating rural businesses is a challenge with government efforts at control
3542364223					
3538622352					
3538569436					
3508808727					
3470926968					

RespondentID

3459776529						
3474383773						
3509083543						
3468883544						
3470957883						
3468842052						
3509019449						
3509088390						
3538569451						
3468669800	Rural needs economic development assistance/funding	high low income	jobs based on one or two main industries/not diversified			
3468948877						
3560131093	people moving in wanting to change the rural character of Jerome Idaho and Magic Valley					
3509074381	Close-Knit	Dairies	FFA	4-H	County Fairs	Rodeos
3538435777						
3468849090						
3553895266						
3470388418						
3476140006						
3538555664						
3471095660						
3538924596						

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3509083185						
3479900772						
3552879763						
3540703528						
3536818245						
3468849441	flag pole	neighborly	diverse recreation options	flower boxes	little village	cooperative
3538779564						
3538594349						
3540611920						
3511925177						
3470082319						
3468865901	Street trees	Farm structures such as barn, implement shed, stable	Sale ring	Quonset hut storage	Shelter belts	ponds
3477459629						
3479229560	fishing					
3521812319						
3551426233						
3542378238	Government regulations can stifle commerce	We often feel the federal gov't is a bully	You may get a skewed result on this survey because rural people will not have the time or education to fill out such a long, complicated, awkward survey!	So the people who will fill it out may be the more leisured, educated		
3542364223						
3538622352						
3538569436						
3508808727						
3470926968						

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3459776529						
3474383773						
3509083543						
3468883544						
3470957883						
3468842052						
3509019449						
3509088390						
3538569451						
3468669800						
3468948877						
3560131093						
3509074381	Fishing	Hunting				
3538435777						
3468849090						
3553895266						
3470388418						
3476140006						
3538555664						
3471095660						
3538924596						

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3509083185						
3479900772						
3552879763						
3540703528						
3536818245						
3468849441						
3538779564						
3538594349						
3540611920						
3511925177						
3470082319						
3468865901	creeks/irrigation ditches	Head in street parking	Cemetary	Church	Center Square	park
3477459629						
3479229560						
3521812319						
3551426233						
3542378238						
3542364223						
3538622352						
3538569436						
3508808727						
3470926968						