

ORDINANCE 2016-07

**AN ORDINANCE ENACTING THE TOOELE COUNTY
TRANSPORTATION PLAN 2015**

WHEREAS, the Tooele County Commission and County Planning Staff have been working to create a County Transportation Plan in coordination with an updated County General Plan; and

WHEREAS, the original Tooele County General Plan included a County Transportation Plan, which was Chapter 13; and

WHEREAS, the County desires to have the Transportation Plan removed from the newly revised Tooele County General Plan Update 2015 and adopted as a separate plan known as the Tooele County Transportation Plan 2015; and

WHEREAS, input and feedback from the public was received through a scoping meeting, an alternatives workshop, and an open house for review of the draft prior to final adoption; and

WHEREAS, the General Plan Steering Committee worked closely with the project team to make key decisions and to interpret public feedback, including developing the Guiding Principles and selecting the preferred alternative.

NOW, THEREFORE, BE IT ORDAINED BY THE LEGISLATIVE BODY OF TOOELE COUNTY, UTAH AS FOLLOWS:

SECTION I – TRANSPORTATION PLAN ADOPTED. The Tooele County Transportation Plan 2015 is hereby adopted to read as attached hereto, which attachment is, by this reference, made a part hereof.

SECTION II - REPEALER. Ordinances and resolutions in conflict herewith are hereby repealed to the extent of such conflict.

SECTION III - EFFECTIVE DATE. This ordinance shall become effective fifteen (15) days after its passage, provided it has been published, or at such publication date if more than fifteen (15) days after passage.

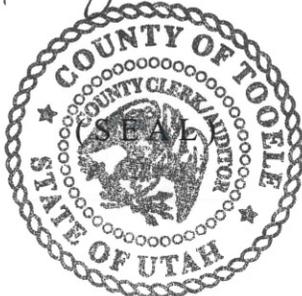
IN WITNESS WHEREOF the Tooele County Commission, which is the legislative body of Tooele County, passed, approved, and enacted this ordinance this 21st day of June 2016.

ATTEST:

TOOELE COUNTY COMMISSION:

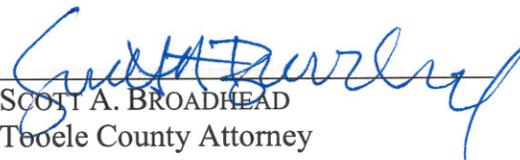

MARILYN K. GILLETTE, Clerk/Auditor


WADE B. BITNER, Chairman

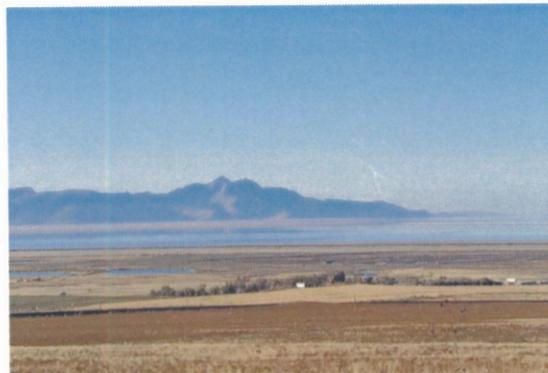
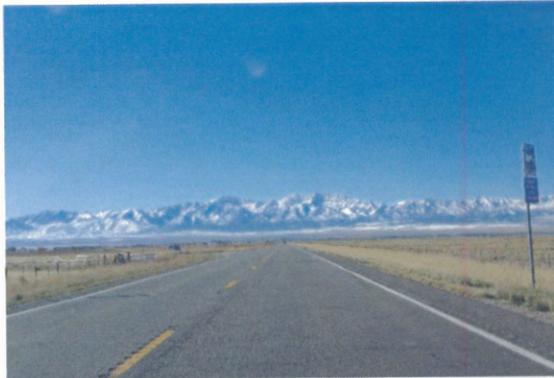


Commissioner Bateman voted aye
Commissioner Bitner voted aye
Commissioner Milne voted aye

APPROVED AS TO FORM:


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Tooele County Attorney

Tooele County Transportation Plan 2015



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Tooele County Transportation Plan

- 1 | Introduction and Purpose.....1
- 2 | Principles and Policies.....2
- 3 | Networks.....17
- 4 | Streets.....32
- 5 | Projects.....60
- Appendix

1 | Introduction and Purpose

The Tooele County Transportation Plan sets the vision, policies, and implementation measures for transportation in Tooele County for the next 25 years and beyond. This plan is both a Transportation Master Plan and the Transportation Element of the General Plan.

The transportation infrastructure for which this plan provides guidance serves multiple purposes. While the movement of people into, around, and out of Tooele Valley is a paramount use of the roads, streets, tracks, and paths that will be built over time in the Valley, this transportation infrastructure will also determine the shape of the Tooele Valley community. Thus, it will strongly inform economics, housing, recreation, preservation, regional sustainability, and how people live. This document recognizes these many roles of the transportation network, and this is why the process to create it was so tightly connected to the visioning efforts of the General Plan. This plan intends to be a foundation of values and vision and a structure of connected networks and types of streets, onto which Tooele County and others will, as conditions direct, add the detailed standards and designs that will ultimately lead to the construction of projects.

The Plan was developed from July to December 2015. It was developed in conjunction with the Tooele County General Plan: both plans worked through a common set of public meetings and Steering Committee. Consequently, the Land Use, Housing and other elements share Guiding Principles and Policies that create a common direction for Tooele County.

The Plan was developed also in conjunction with the Utah Department of Transportation TravelWise program. The Wasatch

Front Regional Council's Transportation-Land Use Connection Program funded the plan.

The Plan focuses primarily on Tooele Valley, as this area is the current population and economic center of the county, and most growth is predicted to occur in this area.

The plan was powered by a robust public outreach and stakeholder process. It included three well-attended public meetings: a scoping meeting in July, an alternatives workshop in September; and an Open House in December. Most importantly, the Tooele General Plan Steering Committee worked closely with the project team to make the key decisions and interpret public feedback, including developing the Guiding Principles and selecting the preferred alternative.

The Plan is organized into four key sections: Principles and Policies; Networks; Streets; and Projects. For aspects of the Plan's development, including existing conditions and alternatives, please see the Appendix.



2 | Principles and Policies

The Principles and Policies describe the Guiding Principles of the Tooele County Transportation Plan developed by the project team and the General Plan Steering Committee and the policies developed to achieve the principles.

Principle 1. Implement the Midvalley Highway.

Policies:

1.1 Support the Preferred Midvalley Highway Alternative. The 2010 Midvalley Highway Environmental Impact Statement (EIS) identified a preferred alternative for the Midvalley Highway that includes a four-lane freeway from I-80 to SR-112; a four-lane arterial from SR 112 to SR-36; a realignment of Sheep Lane at SR-138; interchanges with the Midvalley Highway at I-80, SR-138, and 1000 North as well as the proposed Tooele Parkway; and structures over Erda Way, Sheep Lane, and the Midvalley Trail, and at-grade intersections with SR-112 and SR-36. Tooele County will work with project partners to implement this alternative.

1.2 Seek funding for the first phase. Tooele County should work with project partners to seek funding for the first phase of the project, which includes the interchange with I-80 and the freeway from I-80 to SR-138.

1.3 Prioritize the first Midvalley Highway phase. The first Midvalley Highway phase is one of the most important transportation projects in Tooele County in the first phase of projects (2016-2025).

1.4 Create a Primary Freight Route. The Midvalley Highway will serve as a Primary Freight Route for Tooele Valley, making it the main

north-south freight route in the Valley and taking freight emphasis off SR-36 between Tooele City and I-80.

1.5 Include active transportation in the facility design. As part of the Midvalley Highway project, include a closely parallel route for active transportation. From I-80 to SR-112, this route should be a separated multi-use path similar to the Legacy Parkway trail with safe and convenient connections to crossing streets, trails, and destinations.

1.6 Integrate interchanges into communities. Ensure that the design of Midvalley Highway interchanges mitigates traffic impact on existing and future communities while facilitating mobility for the community and commerce. Ensure that traffic entering and exiting the freeway coexists safely with other modes using these areas.

1.7 Connect to an improved Sheep Lane. In the first phase of the Midvalley Highway, the freeway will transition into an improved 4-lane arterial along the general Sheep Lane alignment.

Principle 2. Re-envision State Route 36 as a companion to the Midvalley Highway that complements the vision for Tooele Valley communities.

Policies:

2.1 Continue to move people through Tooele Valley and to Salt Lake Valley along the SR-36 corridor. The SR-36 corridor is and will remain the primary route for moving people from core Tooele Valley communities such as Tooele City, Grantsville, Erda, Stansbury Park and Lake Point through the Valley and especially to Interstate 80 and the rest of the Wasatch Front. However, this plan recommends changing the focus of the corridor from moving automobiles to moving people – in a variety of transportation modes.

2.2 Create a community spine by building activity centers along the corridor and connecting them. The Tooele County General Plan directs much of future growth to activity centers along the SR-36 corridor. With this focus, SR-36 will continue to develop into a community “spine” for the core of Tooele Valley. This spine will be where land use and transportation are both at their most intensive and will need to complement one another in sustainable ways.

2.3 Transform SR-36 into a multi-modal boulevard within the activity centers. In its role as community spine, SR-36 will continue to emphasize long-distance mobility. However, within designated activity centers, SR-36 should adopt a more “boulevard” type design that can still move high volumes of traffic through the center but also provide safe and comfortable routes for walking and bicycling, public space, and can relate to adjacent development in a pedestrian-supportive way and at a human scale.

2.4 Build transit market and service along the corridor. A major piece of the SR-36 community spine is the creation of a high-quality transit corridor. Creating this transit corridor means several things. First, it means developing the market for transit with land use planning and economic development – putting in place new development whose residents and employees are incented to choose to ride transit. Second, it means evolving the quality of service available along the corridor, from the current peak-time commuter buses, flex routes and vanpools to more regular and higher frequency all-day bus routes to potentially in the future a high-capacity transit option such as bus rapid transit. Finally, creating a quality transit corridor along SR-36 means creating good access to transit for pedestrians, bicyclists, connecting transit riders and motorists parking and riding. The string of activity centers identified in the General Plan will be a critical element of this transit corridor, as they will be the locations for transit hubs and priority locations for transit markets and access.



Within activity centers, SR-36 should become a boulevard, with center lanes that move regional traffic and transit, and sides that are slower and walkable.

2.5 Encourage open space and rural character between centers. While creating a string of activity centers is critical to the overall vision of the community for Tooele Valley, the community also places great importance on the preservation of open space and the existing valley character along the SR-36 corridor. It is vital that the corridor does not become a “linear” city with no definition of communities and a loss of the existing valley character.

2.6 Update UDOT corridor agreement for SR 36. Work with UDOT to update the corridor agreement governing access management, traffic control, and right-of-way for SR-36 that reflects both the state’s goals for the facility and the goals and policies of this plan.

2.7 Improve conflicts and overall safety where SR-36 meets I-80 at Exit 99. The area around the I-80 interchange with SR-36 is dangerous because of conflicts among fast-moving vehicles entering and exiting the freeway, large trucks, turning movements, and the commercial activity at the interchange. Future plans for this area will include an emphasis on safety improvements.



Tooele County will look for opportunities to develop SR-36 as a high capacity transit corridor. This image shows a Bus Rapid Transit (BRT) line in Eugene Oregon in the street median.



The community is supportive of preserving open space along SR-36 between activity centers, similar to this image.

Principle 3. Create a safe and comprehensive trails network that connects regional and local destinations, serves non-motorized and motorized users, and improves transportation and recreation.

Policies:

3.1 Create active transportation spines through the core of the valley.

The largest and most immediate active transportation priority is to plan, design, and build a simple system of active transportation spines that provide a consistent, paved, separated path from end to end, with highly visible and safe crossings of major transportation facilities. The Active Transportation Network (Chapter 3) identifies a north-south Primary Active Transportation Route and an east-west Primary Active Transportation Route. The north-south route connects planned and proposed projects such as the “sound wall” trail in Stansbury Park with opportunities such as Rabbit Lane as well as smaller-scale roads such as 400 West and Center Street to create a route from Lake Point to Tooele City. The east-west route uses Erda Way, which, in most places has the space for a separated pathway. These active transportation spines are designed to connect to major existing and planned activity centers as well as spur trails and trailheads.

3.2 Create a non-motorized trail network circling the valley core. The outlying areas of Tooele Valley provide excellent and varied scenic resources such as Great Salt Lake shorelands, agricultural fields, and Oquirrh foothills. The Tooele County General Plan proposes focusing development in the valley core, but these outlying areas provide the opportunity for accessible recreational trails. Tooele County will work with public and private partners to build a network of trails surrounding the valley core, emphasizing trails between SR-138 and

the Great Salt Lake and in the Oquirrh foothills and Bonneville Shoreline bench. These trails could function like the Bonneville Shoreline Trail in the Salt Lake Valley while having the benefit of being planned into key access points such as trailheads and activity centers.

3.3 Connect communities to transit hubs with active transportation facilities. A major priority for active transportation infrastructure is to connect communities and neighborhoods to designated transit hubs. This infrastructure includes paths, sidewalks, and bike facilities and safe crossings of major facilities.



The planning process showed heavy support for paved trails separated from traffic that provide recreational as well as transportation benefits. Credit: Cromagnom.

3.4 Connect to and build on existing and additional trailheads. Tooele Valley contains several existing developed trailheads with vehicle parking, staging, and wayfinding information. These trailheads should be further integrated into the trail network planned for the valley.

3.5 Include opportunities for motorized trail recreation. The community has expressed interest for also maintaining access for motorized recreation. Due to its focus on transportation, this plan does not address the details of motorized recreation but it is important to include opportunities for this type of recreation in a way that is compatible with non-motorized recreation and communities.

3.6 Capitalize on road projects to build active transportation infrastructure. As existing roads are improved and new projects are built, county staff and project partners should recognize the networks and projects proposed in this plan and seek opportunities to include active transportation facilities in these projects. Chapter 4 Streets in this plan suggests ways each Street Type should integrate active transportation in its design.

3.7 Consider future trail connections east from Tooele Valley to destinations such as Saltair, west side Salt Lake Valley communities, and Salt Lake City. In addition to trail connections within the Valley, Tooele County will look for opportunities to connect the valley to the rest of the Wasatch Front.



Trails should connect Tooele Valley communities to destinations such as parks.

Principle 4. Grow and build upon the existing system of transit routes and seek opportunities for new high-speed, high capacity, long-distance services.

Policies:

4.1 Continue and build the set of transit services currently serving Tooele Valley, including commuter routes, flex routes, and vanpools.

Currently, Utah Transit Authority runs a limited set of transit services to, from, and within Tooele Valley. These include peak-hour commuter buses to Salt Lake Valley; flex routes connecting valley communities; and vanpools providing an even more flexible and small scale tool to collectively provide transportation to key employment and other destinations. Tooele County and UTA will work together to monitor the success of these services and grow them with improved transit markets in employment hubs and activity centers.

4.2 Develop transit markets throughout the valley through land use planning, economic development, and transportation demand management.

Tooele County will work with jurisdictions, institutions and communities to make transit a more attractive choice. In the near term, this likely means building vanpools at key employment centers, working with employers to make transit make sense financially, and incenting communities to use transit hubs by improving access and convenience. In the long term, the designated activity centers provide the major place to build these transit markets through residential and employment density and a rich array of sustainable transit services passing through key hubs.

4.3 Focus transit service on the SR-36 corridor both within the valley and to the rest of the Wasatch Front.

SR-36 is the largest transit opportunity for Tooele Valley because it is a simple linear corridor

that can string together a variety of existing and new centers where a variety of transit services can be concentrated. The policies under Principle 3 provide transit guidance for the SR-36 corridor.

4.4 Look for opportunities for future high-capacity transit connecting to Salt Lake Valley.

Tooele County will continue to monitor opportunities for more intensive, high capacity transit connecting to Salt Lake Valley and the rest of the Wasatch Front. The most likely of these is an intensification of the commuter service along the SR-36 corridor down I-80 and around the point of the mountain. A more long-term option may be a rail tunnel through the Oquirrh Mountains to connect with the rail network in Salt Lake Valley. The success of either will likely depend on improved transit markets and activity centers in Tooele Valley to provide the riders to justify these services.

4.5 Develop and evolve transit hubs throughout Tooele Valley.

A transit hub is a place where transit service is concentrated so that a rider has access to an array of services to local and regional destinations. Just like transit services, transit hubs can build and evolve over time. Currently, the valley's transit hubs consist of park and ride lots with limited bus services. However, the presence of these lots can help get the community used to riding transit there. Near-term improvements should include seating, lighting, bike lockers and improved bike and pedestrian access. In the long term, new development can build around these hubs, adjacent community amenities such as parks, community centers, and retail shops can complement them, and they can become more walkable, eliminating some or much of the need for the park and ride lots. The Transit Network in Chapter 3 designates near term and long term transit hubs that can evolve in this manner.

Principle 5. Make strategic grid connections that unify poorly connected areas into coordinated places.

Policies:

5.1 Provide multiple future options for north-south and east-west travel throughout Tooele Valley. Currently, Tooele Valley has limited options to travel both north-south and east-west – the result of these limited connections is that traffic is funneled into bottlenecks, the most severe of these being SR-36. One of the key aspects of this plan is to improve vehicle capacity in the valley by improving connectivity and options for different routes rather than widening roads. This is an approach that is better for all modes rather than just private automobiles. In the near term, Tooele County should focus on shorter, key connections that alleviate bottlenecks and open up alternative routes, such as the Saddleback-Droubay connection, the extension of Village Boulevard and the improvement of 400 West. In the long term, the focus should be the development of parallel routes such as Tooele Parkway and 1200 West.

5.2 Create a vehicle bypass of S.R. 36 through Lake Point to the east. Tooele Valley’s key traffic bottleneck to alleviate is the segment of SR-36 through the Lake Point area. Models of future traffic demand project congestion to worsen beyond capacity at the peak hour. While the addition of the Midvalley Highway will help alleviate this, it is also important to provide an east-side bypass. This plan proposes a connection of Saddleback Boulevard to Droubay Road to provide a route that bypasses all of the SR-36 congestion leading to Exit 99 at Interstate 80.

5.3 Focus on connecting the area bounded by S.R. 36, 1200 West, Bates Canyon Road, and the planned Tooele Parkway internally and to

adjacent communities such as Stansbury Park and Tooele City. This area will be a focus for growth over the next few decades. Transportation improvements should connect this area externally to community amenities in Stansbury Park, Tooele City, and Grantsville City, and internally, while maintaining the rural character of much of the area.



These new developments have a high level of connectivity. Streets in the example above connect well to community destinations like schools and parks; streets in the example below connect the residential neighborhoods to the major street in the center of the image.

5.4 Ensure that road connection projects create connections for all transportation modes. These additional grid connections should be planned as multi-modal, with opportunities for transit and active transportation, following the guidance of the mode networks in Chapter 3.

5.5 Ensure that new development is well-connected externally and internally. New development in Tooele Valley should add to the sense of connectivity in the valley. Externally, new developments should have multiple ingress and egress points that emphasize getting in and out of the development by foot, bike, and car. Internally, development should avoid cul-de-sacs and create fine-grained block patterns. Where cul-de-sacs do occur, they should have pedestrian connections through to the next street.

5.6 Streets within new developments should follow guidelines established by the Street Types in Chapter 4. New development applications should include a map of showing proposed street type designations of new internal streets. These will primarily be the Local and Local Rural types but larger developments could include the Connector designations.

5.7 Ensure that new developments have a well-connected pedestrian network. While, especially in rural/low density areas, new development does not need to include sidewalks or pedestrian paths on every street, applications in Tooele Valley should provide a plan on how neighborhood residents will walk within the development and to nearby destinations. The developer should provide a connected framework of pedestrian infrastructure (sidewalks and/or trails; and crossings of streets) on key routes.

5.8 Make strategic additional railroad crossings. The Union Pacific Railroad is a barrier to connectivity in Tooele Valley, especially on the east side. The Vehicle Network in Chapter 3 identifies key places to improve and create new railroad crossings.

Principle 6. Create sustainable and multi-modal ways to move Tooele Valley commuters to and from the Salt Lake Valley and other job areas in a manner that is efficient, reliable, and convenient.

Policies:

6.1 Maintain I-80 as the primary access to Salt Lake Valley. Interstate 80 will continue to be Tooele Valley’s primary route to Salt Lake Valley and the rest of the Wasatch Front – both through its existing interchanges and the future planned interchange at Midvalley Highway. Tooele County will work with UDOT to ensure continued mobility along this route.

6.2 Consider additional vehicle connection options to Salt Lake Valley. It is important for Tooele County to develop alternative routes to Salt Lake Valley both to provide transportation choice and also in cases of emergency or closure of the primary route. These additional routes to consider include the potential for extension of S.R. 201 into the valley parallel to I-80, and/or an improvement of the Middle Canyon road to Herriman.

6.3 Diversify the ways people can access Salt Lake Valley from Tooele Valley. Tooele Valley residents, employees, students, and visitors should have a choice in the ways they move between Tooele Valley and the rest of the Wasatch Front. This plan proposes several aspects of the transportation network that can increase this choice, including the addition of the Midvalley Highway, better road connectivity, improved transit service, markets and corridors, and potentially alternative routes in and out of the valley.

6.4 Work with partners to serve commutes to and from Tooele with transit. Commutes between Salt Lake Valley and Tooele Valley are a

main driver of the valley’s transit service. In the future, aspects of this plan can work together to improve transit opportunities for those traveling between the two valleys. See the policies under Principle 4 for more transit-related guidance.

6.5 Work with UDOT to plan an upgraded interchange at I-80 Exit 99. UDOT is considering upgrading Exit 99. Tooele County will work with UDOT to ensure the new design is compatible with the General Plan and Transportation Plan, and especially how the new interchange can work with the planned connection to Saddleback/Droubay to provide an alternative bypass of SR-36.

Principle 7. Plan a freight network that enables economic development while complementing the vision for Tooele Valley communities and other transportation modes.

Policies:

7.1 Develop freight connections to identified freight centers. Tooele County has two existing freight centers as identified in the Utah State Freight Plan – at the Industrial Depot and at the Wal-Mart Distribution Center. There is an additional planned freight center at the proposed industrial park north of Interstate 80. Tooele County will work with partners such as UDOT and Union Pacific Railroad to develop direct and intermodal freight connections to these freight centers.

7.2 Focus Valley freight traffic on Interstate 80 and the Midvalley Highway. The Midvalley Highway will be a Primary Freight Route - one of its major roles will be to transport goods from to and from the freight center at the Industrial Depot to Interstate 80, providing a more efficient connection that bypasses the valley's communities.

7.3 De-emphasize SR-36 for freight traffic. Currently, much of the freight traffic traveling between Interstate 80 and destinations such as the Industrial Depot runs on SR 36 through valley communities. In the future, especially with the construction of the Midvalley Highway and other improvements such as a widened Sheep Lane, freight traffic will de-emphasize SR-36, which will serve as the valley's community spine.

7.4 Leverage the railroad for freight movement. Tooele County will continue to use the Union Pacific Railroad running through the valley for freight transport. Capitalize on its proximity to its freight centers.

7.5 Maintain Lake Point/Exit 99 as a trucking hub. The cluster of businesses just off Interstate 80 at Exit 99 has emerged as a hub for trucking activities. The county will continue to promote this immediate area as a trucking hub while – considering the recommendation to de-emphasize the SR-36 corridor – not encouraging trucking uses further up SR-36, especially at the Mills Junction area and beyond.

Principle 8. Support multi-modal transportation in communities, especially in existing and emerging activity centers.

Policies:

8.1 Enable all users of the transportation system to thrive while remaining safe. Design, build, and maintain the transportation network so that all types of users can safely move around Tooele Valley communities. The network should seek to balance the integration of different types of users into the same facilities while also managing conflicts. This balancing should be especially focused in the designated activity centers.

8.2 Create the foundation of walkability within designated activity centers. The ability to walk comfortably and conveniently will be the foundation of the activity centers designated in the General Plan. The activity centers will be planned to accommodate higher intensities of residential, commercial and employment development. They will be developed in different sizes, shapes and with different emphases but they will all be foremost places for people, and in order for that to happen they need to respond to the needs of pedestrians. These needs include high quality pedestrian environments with enough space to move and stop, shade and interest; a choice of connected routes to destinations; quality public space; maintenance of pedestrian infrastructure; and development that is at a human-scale and orients to pedestrians.

8.3 Create transit hubs as a central feature of activity centers that are accessible for all modes, especially pedestrians, cyclists, and

connecting transit riders. A transit hub is a place where transit service is concentrated so that a rider has access to an array of services to local and regional destinations. In Tooele Valley, transit hubs will develop over time from park-and-ride lots to focal points of communities. Tooele County will work with UTA to situate and develop transit hubs in activity center locations that are accessible to all modes and can be surrounded by complementary development.

8.4 Bring together regional and community level transportation facilities in activity centers in a coordinated way that balances regional transportation and community life. Activity centers are crossroads, where regional highways and smaller roads and streets intersect to provide access to destinations and amenities. Tooele County will ensure that the goals of the different transportation facilities will be balanced with the quality of life of the community.

8.5 Create a high level of street connectivity within activity centers. Within designated activity centers, streets should connect to one another and blocks should be small.

8.6 Plan vehicle circulation and parking in a coordinated way that is convenient but also supports the walkability of the center. Good vehicle circulation and enough parking is essential in Tooele County activity centers. Tooele County will coordinate vehicle access and parking for activity center uses and, where possible, coordinate and build district parking to be shared by different uses.

Principle 9. Preserve opportunities for expansion of all transportation modes within the transportation network.

Policies:

9.1 Plan all new major street corridors with room to accommodate growth of all modes, whether vehicles, freight, transit, or active transportation. As we have seen in Salt Lake Valley, urban growth often means a variety of demands on the street network by different transportation modes, and this often requires a lot of space. Tooele Valley has the opportunity to plan for potential growth by preserving enough right-of-way in major street corridors to accommodate future traffic increases, transit services, freight movement, and active transportation infrastructure. While these improvements may never be warranted, it is important to have the right-of-way to accommodate them in new transportation corridors. See Chapter 4 Street Types section for details

9.2 Strategically expand existing major corridors to preserve opportunities for accommodation of appropriate modes. While some street corridors are currently achieving their function for the foreseeable future, others could need to be expanded in the future. For those that this plan prioritizes for future transportation improvements, strategically expand the right-of-way. See Chapter 4 Street Types section for details.

9.3 Plan local streets to accommodate all appropriate modes. New local streets will be designed to accommodate all the modes appropriate to that scale of the street. Most local streets in higher density neighborhoods will prioritize walking and bicycling while accommodating slow auto movement. See Chapter 4 Street Types section for details.

9.4 Capitalize on opportunities to implement the valley-wide trail network. As streets and roads are improved carefully consider opportunities to include active transportation infrastructure as part of those projects. See Chapter 3 Active Transportation Network and Chapter 4 Street Types.

Principle 10. Use the transportation network to preserve rural character, open space, views, and other aspects of Tooele Valley valued by its citizens.

Policies:

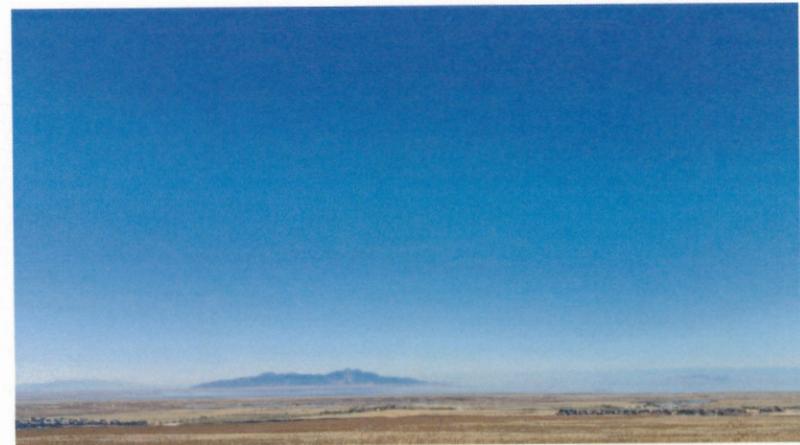
10.1 Throughout the network, balance streets that emphasize improved mobility with those that preserve rural character. The Tooele County Transportation Plan transportation network includes streets planned to carry the burden of future traffic increases as Tooele Valley grows. But it also includes streets that will retain their current rural character, much of which is conveyed by the small, simple two-lane rural streets themselves. These “Rural Preservation” streets include Erda Way, segments of Droubay Road, 400 West, many Lake Point streets, and others. See Chapter 4 Street Types for details.

10.2 Use street design to preserve rural character of specific corridors. Rural Preservation streets will focus on retaining their human scale and improvements will augment these qualities with infrastructure like walking or bicycle paths. Land use and urban design planning will focus on preserving the relationship between the agricultural buildings, houses, trees and landscape, and the street.

10.3 Support compact growth in designated activity centers and along established transportation corridors so to preserve open space in other parts of the valley. Concentrating growth along specific transportation corridors and within designated activity centers will leave open the option of preserving the open space, agriculture and views valued by the community.

10.4 Develop trails and trailheads that improve the enjoyment and understanding of Tooele Valley natural resources such as habitat,

wildlife, ecosystems, and views, with minimal compromise of these resources. Sensitively planned trails can increase understanding of Tooele Valley’s scenic and natural resources while preserving these resources for future generations. Tooele Valley trails will focus on access by trailheads and the avoidance of major impacts on natural resources such as wetlands.



Views and open space are some of Tooele Valley’s most valued attributes. The transportation network can be instrumental in helping to preserve these resources.

3 | Networks

The Tooele County Transportation Plan ensures a balanced transportation system by addressing the ways each key transportation mode moves around the valley and ensuring that each of these networks is compatible with one another on Tooele Valley streets, highways, trails, and other transportation facilities.

The transportation networks are one tool to implement the Principles and Policies in Chapter 2. The following presents the planned networks for the four key modes in Tooele Valley:

- Private Vehicles
- Freight
- Transit
- Active Transportation – walking and bicycling

While these networks convey priorities for connection for the four modes, the Plan’s recommendations for physical improvements can be found in the Streets and Projects sections, which bring together the networks into design guidance and a Capital Improvement Program for transportation facilities.

Vehicle Network

The Vehicle Network conveys how vehicles move through and around Tooele Valley. The Vehicle Network includes a hierarchy of streets and roads that ranges from Interstate 80 to local streets. In the vehicle network, the Tooele County streets are organized by functional classification: Freeway; Arterial; Major Collector; Minor Collector; and Local. The Vehicle Network also includes special features like freeway interchanges and railroad crossings.

Vehicle Network opportunities to achieve the Plan's Guiding Principles and implement the policies include:

- Implementation of the Midvalley Highway to serve freight, freeing up room and creating safety for passenger traffic on SR 36.
- Implementation of the Midvalley Highway to distribute peak commute traffic to Salt Lake Valley.
- Implementation of the Midvalley Highway to handle special event traffic from Deseret Peak and other destinations.
- Implementation of the Midvalley Highway to avoid addition of mixed flow vehicle lanes to SR 36.
- Creation of a north-south connection to I-80 to provide an alternative to SR 36 through Lake Point.
- Connection of Village Boulevard and 400 West in the near term to help complete the core Tooele Valley grid and create more transportation network options.
- Long-term connections of central Tooele Valley grid to highways such as SR 138 and 112.
- Development of key railroad crossings in Lake Point and Erda to create more direct connections between communities and destinations.

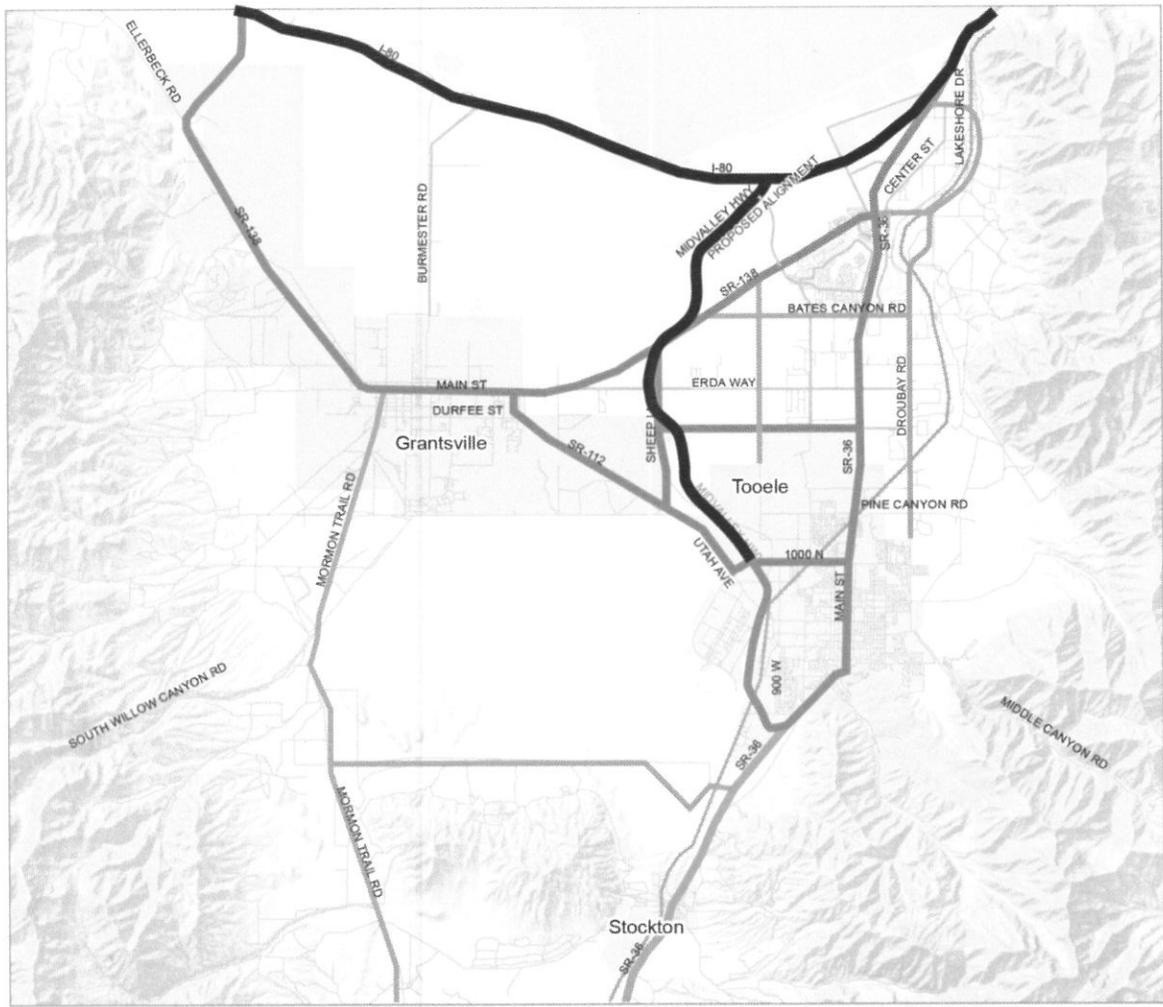
- Building of the Tooele Parkway to create another east-west connection that could tie into the Midvalley Highway.
- The widening of Sheep Lane to move traffic from the first phase of the Midvalley Highway in north part of the Valley.
- Creation of a street along the bottom of the foothills connecting Lake Point, Erda, Pine Canyon and Tooele City and avoiding the railroad tracks.
- A parallel route to I-80 connecting Lake Point and SR 201, providing an alternative route out of the valley.
- Create "Park once and walk" approach to activity centers.
- Stricter access management standards along highways, especially along SR-36.

The Vehicle Network (Figure 3.1) shows the hierarchy of routes designated by Functional Classes. The Functional Classes designate the role of streets for vehicles and include the following number of lanes:

- Freeway: 2 or more through lanes each way
- Arterial: 2 through lanes each way
- Major Collector: 1 to 2 through lanes each way
- Minor Collector: 1 through lane each way

The planned Vehicle Network improvements (Figure 3.2) are presented in three phases: Phase 1 (2016 to 2024); Phase 2 (2025 to 2040) and finally a Vision phase, for connections to consider in the future. However, while the phasing of these improvements reflects the current understanding of where and when growth in the valley will demand them, growth could occur in ways that call for quicker or slower building of these improvements.

Figures 3.3 and 3.4 show the projected level of service for the Phase 1 and 2 time horizons if improvements are built.



TOOELE COUNTY TRANSPORTATION PLAN

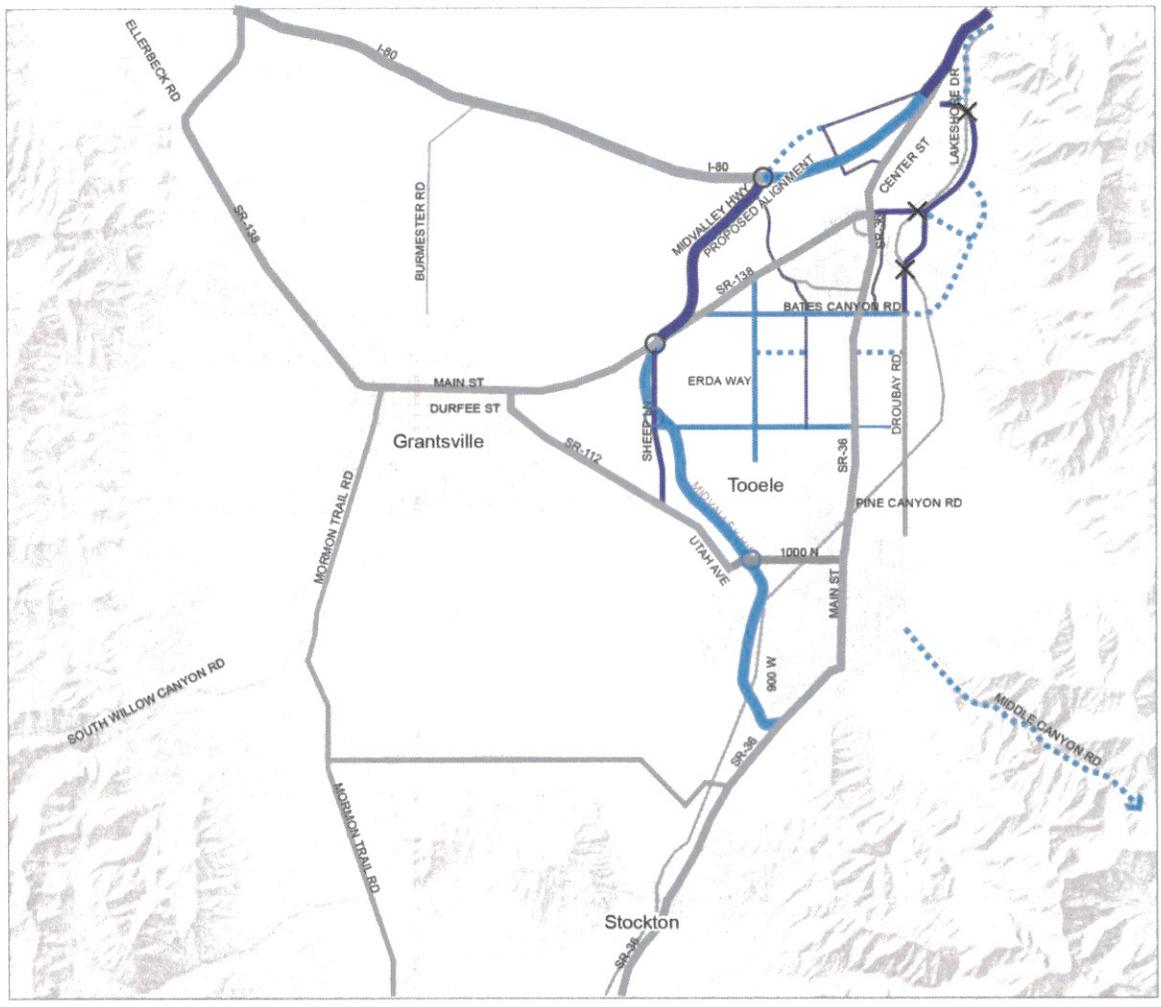
Vehicle Network: Functional Class

-  Freeway
-  Arterial
-  Major Collector
-  Minor Collector



Data Source: WFRC, Tooele County

Figure 3.1: Vehicle Network

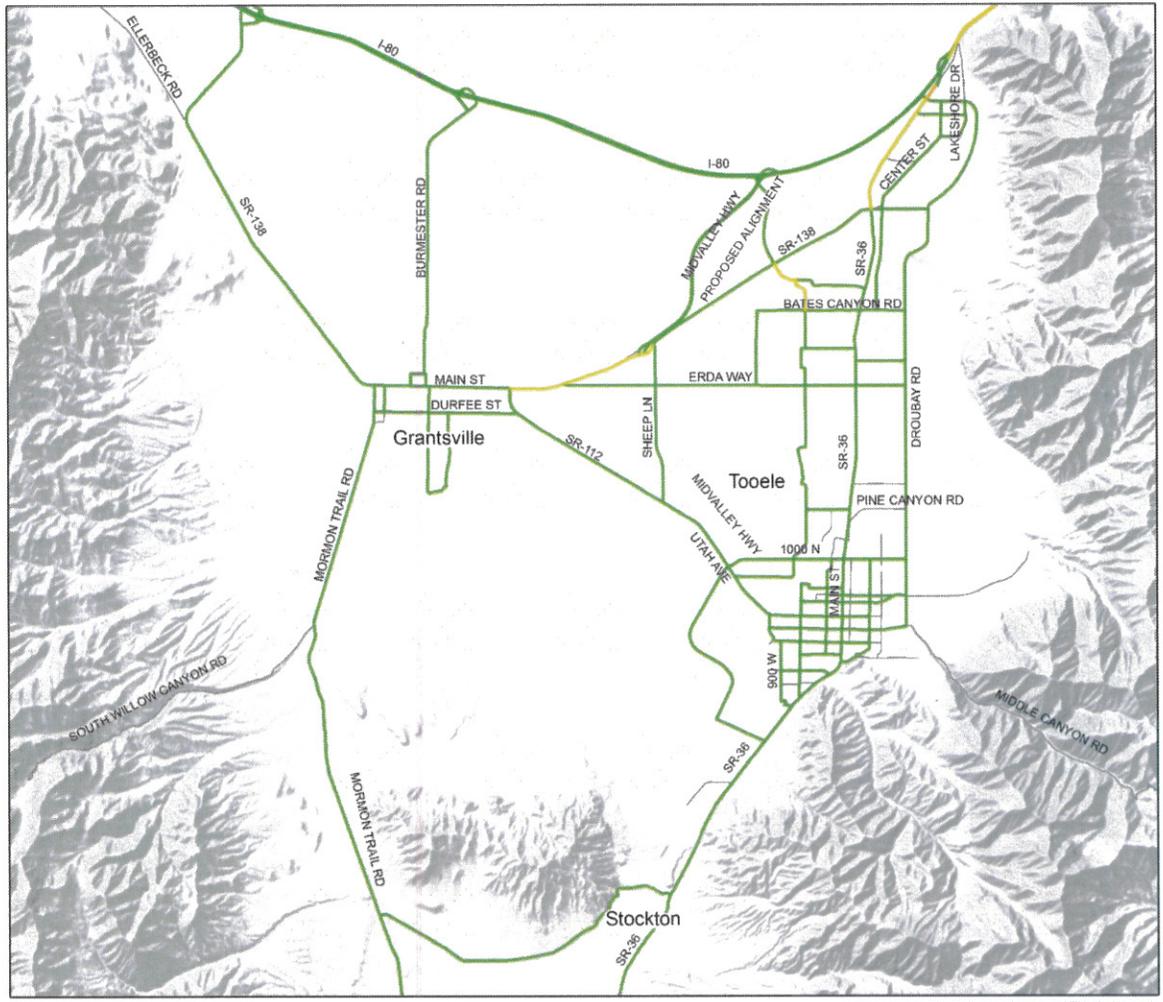


TOOELE COUNTY TRANSPORTATION PLAN

- Vehicle Network**
- New/widened Freeway
 - New/widened Arterial
 - New/widened Major Collector
 - New/widened Minor Collector
 - New Interchange
 - New or improved railroad crossing
 - Phase 1 project
 - Phase 2 project
 - Future connection to consider - Alignment TBD



Figure 3.2: Vehicle Network: recommended improvements.



TOOELE COUNTY TRANSPORTATION PLAN

Preferred Alternative
Phase 1 - 2024
Level of Service

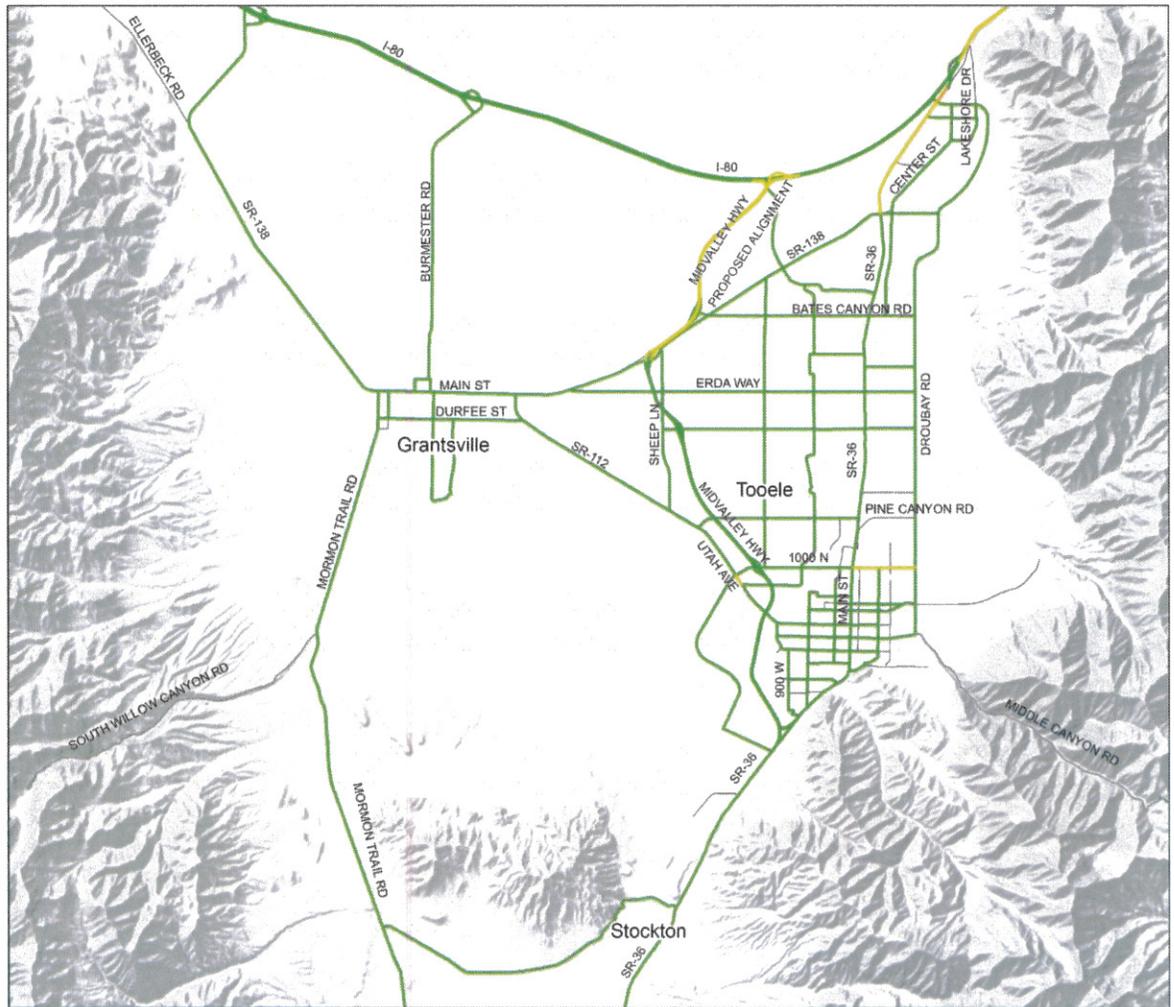
- C or better
- D
- E
- F



0 1 2 4 Miles

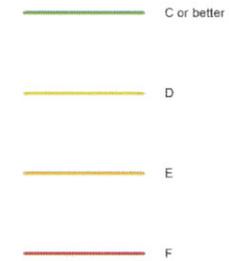
Data Source: WFRM, Tooele County, USTM Model v 1.3

Figure 3.3: Projected level of service for vehicles in 2024 with recommended improvements.



TOOELE COUNTY TRANSPORTATION PLAN

Preferred Alternative
Future - 2040
Level of Service



Data Source: WFRC, Tooele County, USTM Model v 1.3

Figure 3.4: Projected level of service for vehicles in 2040 with recommended improvements.

Freight Network

The Freight Network conveys how trucks and trains carrying commercial freight move through and around Tooele Valley.

Freight Network opportunities to achieve the Plan's Guiding Principles and implement the policies include:

- Midvalley Highway as opportunity to segregate freight traffic from person traffic and move it faster to and from the Industrial Depot and other centers.
- Concentration of industrial uses in key nodes such as Industrial Depot, Lake Point, along Sheep Lane (Reckitt Benckiser) and in Grantsville (Wal-Mart Distribution center).
- Improvements to support planned industrial center north of I-80 at Lake Point.
- Preservation of trucking support services clustered around I-80 Exit 99.
- Improvements to I-80 capacity.
- In general, serving freight is closely tied to the future of economic development in Tooele Valley.

The planned Freight Network (Figure 3.5) includes Freight Centers currently designated by the Utah Freight Plan and planned future Freight Centers. It includes Primary Freight Routes for regional freight traffic moving through the valley to and from Freight Centers; and Secondary Freight Routes are local routes that support Primary Routes and delivery and pickup of freight to and from local destinations.

Transit Network

The Transit Network conveys how public transportation moves through and around Tooele Valley. The existing transit network is shown in Figure 3.6.

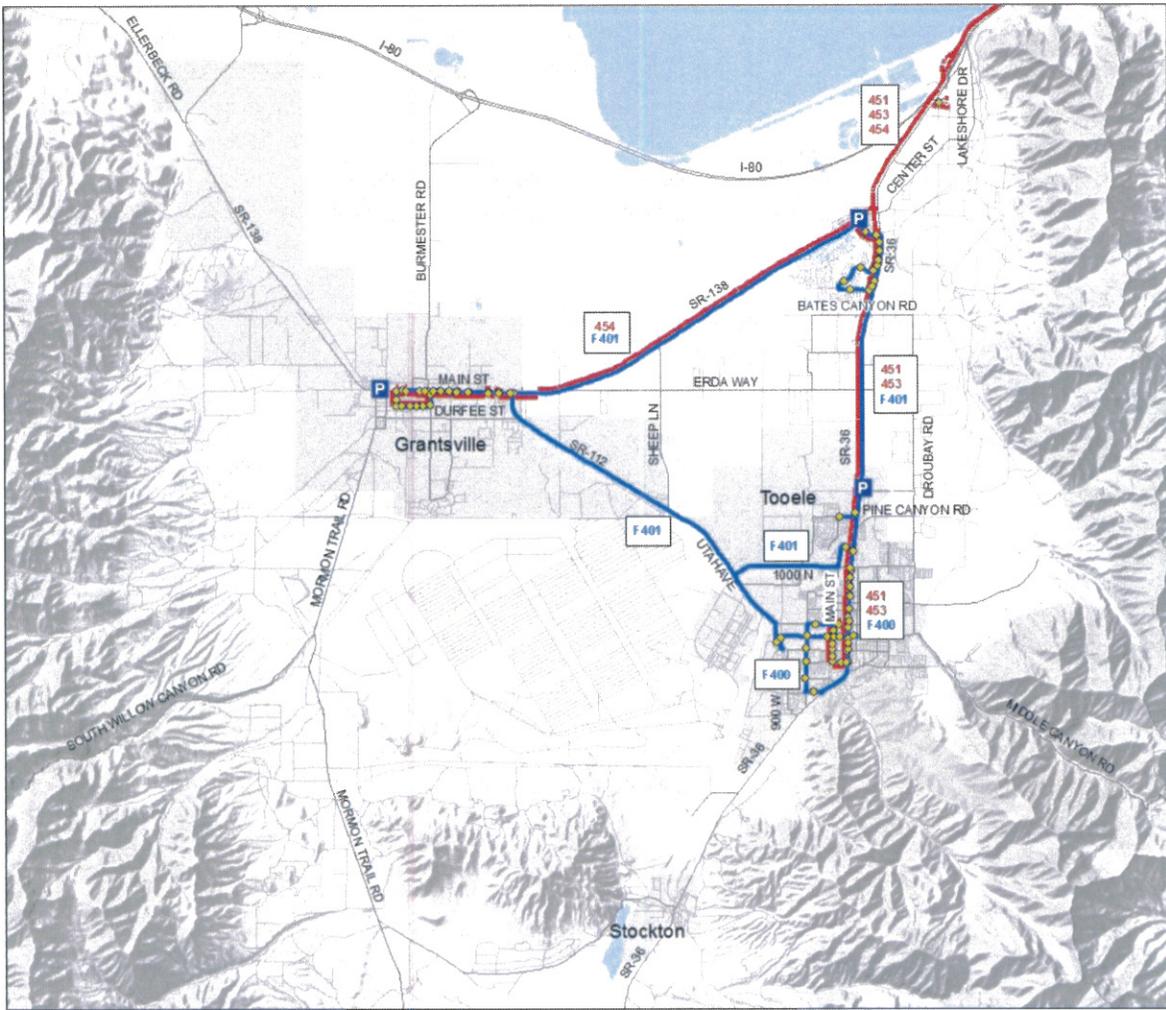
Transit Network opportunities to achieve the Plan's Guiding Principles and implement the policies include:

- As new larger employers open, vanpool demand could increase; monitor this growth for vanpool expansion opportunities.
- Build around existing employment or educational destinations to develop transit-supportive employment clusters.
- Create nodes of residential and employment density on the SR 36 to build a transit market along this corridor.
- Focus on active transportation in designated Activity Centers (see General Plan).
- Implement Tooele Parkway in a design that creates a transit-supportive corridor between Erda/south Tooele, Midvalley Highway corridor, and Grantsville, especially at the node where it crosses SR 36.
- Reimagine SR 36 as a multi-modal urban corridor that supports transit
- Phase in service over time while monitoring ridership, service cost, and growth.
- Monitor work destinations of Tooele Valley residents in the rest of Wasatch Front and consider serving popular destinations.
- Create a near-term transit hub/park and ride at Erda Way to serve Erda community, and develop over time into a small activity center.

- Develop specific markets for transit, including students and seniors, in part through Travel Demand Management programs.
- Continue to develop and coordinate Tooele Valley's flexible transportation service system including vanpools and volunteer driver program.
- As transit market in Tooele Valley evolves, consider bus rapid transit service, likely along SR 36.
- Consider potential future very long-term development of a rail connection between Tooele and Salt Lake Valley.

The planned Transit Network (Figure 3.7) includes current Utah Transit Authority (UTA) routes such as commuter express buses, flex route buses, and vanpools. It includes potential future high capacity transit services such as bus rapid transit.

It also includes transit hubs. A transit hub is a place where transit service is concentrated so that a rider has access to an array of services to local and regional destinations. Just like transit services, transit hubs can build and evolve over time to become the centerpieces of communities. Finally, the Transit Network relates closely to the Active Transportation Network that will support access to the transit hubs and other stops and stations.



Data Source: WFR, Tooele County

TOOELE COUNTY TRANSPORTATION PLAN

Transit Network

- UTA Bus Route**
- Express / Commuter Route
 - Flex Route
 - UTA Bus Stop
 - P Park N Ride Lot

Annual Average Weekday Boardings

Mode	2011	2012	2013
Vanpool	1268	1195	982
Commuter Routes	572	536	524
Flex Routes	75	80	70
Total	1915	1811	1576



Figure 3.6: Existing transit services

Active Transportation Network

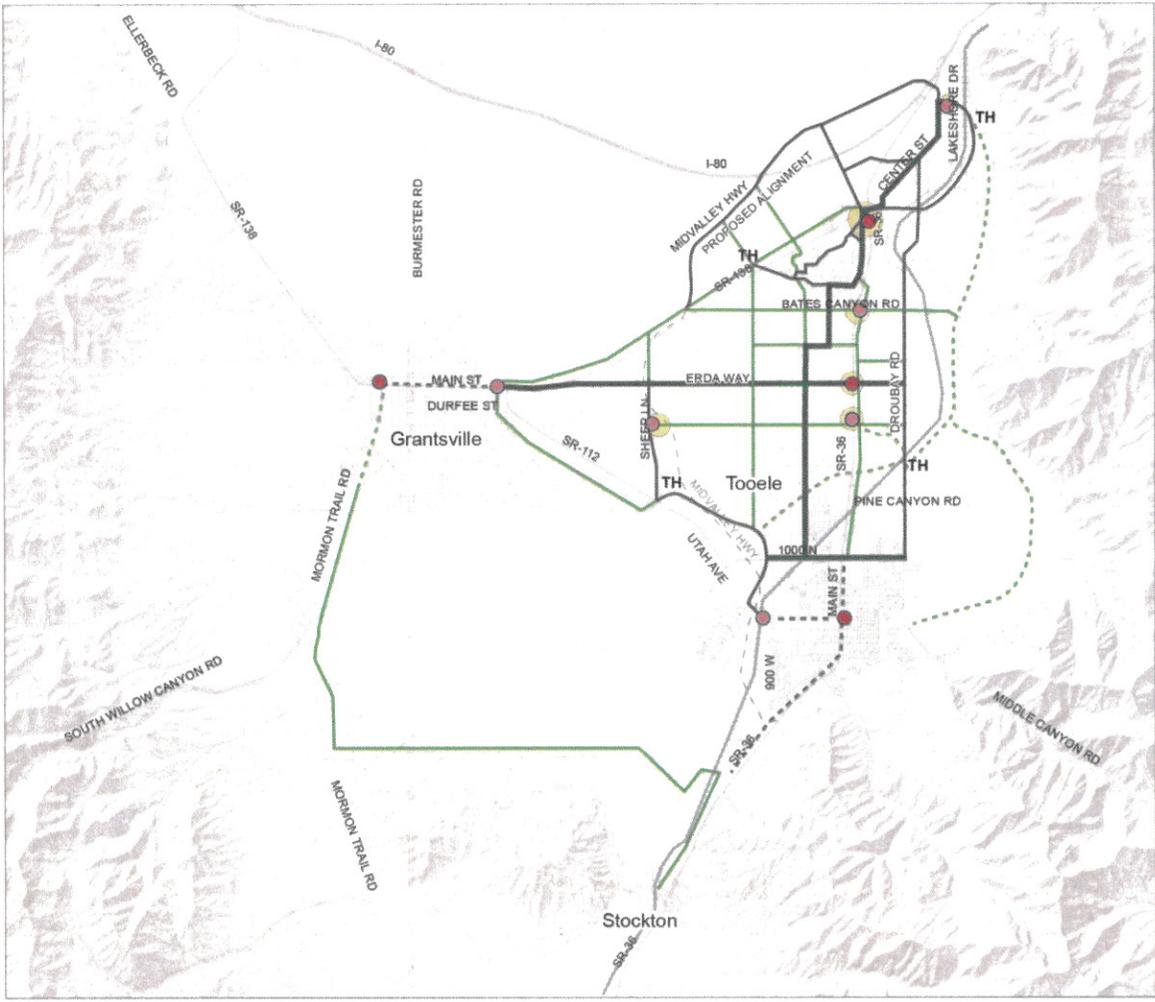
The Active Transportation Network conveys routes for pedestrians and bicyclists in Tooele Valley. It includes both walking and riding for transportation and recreation.

The Active Transportation Network opportunities to achieve the Plan's Guiding Principles and implement the policies include:

- Improved connectivity of Tooele Valley core roads can improve bicycle conditions.
- Create a north-south and east west active transportation trail "spine."
- Focus on active transportation in designated Activity Centers (see General Plan).
- Conversion of rural farm roads to trails, such as Rabbit Lane
- Using trails to reinforce the rural/open space character people value about Tooele Valley
- Build trails to connect key destinations.
- Several large future and potential developments could emphasize walking
- Connection of amenities within Stansbury Park for bicycles.
- Tooele Parkway as opportunity for state-of-the-art bicycle facility connecting Erda and Grantsville.
- Designate 400 West as a primary north-south connection.
- System of trails between SR 138 and Great Salt Lake, including Midvalley Highway corridor.
- Foothill trail connecting Lake Point, east Erda, Pine Canyon and Tooele, similar to Bonneville Shoreline Trail.
- Design rail crossings to accommodate bicycles.
- Development of a hierarchy of regional routes that tie into different cities' networks and local routes.

- Development of a Special Service District for trails.

The planned Active Transportation Network (Figure 3.8) includes primary and secondary active transportation routes, as well as active transportation focus areas that correspond to the planned Activity Centers designated in the General Plan. The planned improvements are presented in three phases: Phase 1 (2016 to 2024); Phase 2 (2025 to 2040) and finally a Vision phase, for connections to consider in the future. However, while the phasing of these improvements reflects our current understanding of where and when growth in the valley will demand them, growth could occur in ways that call for quicker or slower building of these improvements.



TOOELE COUNTY TRANSPORTATION PLAN

Active transportation network

- Phase 1 Valley Trail Spine
- Phase 1 priority active transport corridor
- Phase 2 priority active transport corridor
- Transit Hub - near term
- Transit Hub - long term
- Active transportation focus areas
- Key connection; exact location TBD
- TH** Trailhead

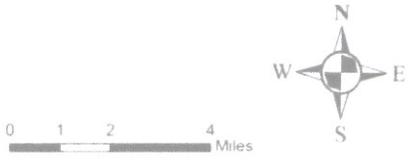


Figure 3.8: Active Transportation Network

4 | Streets

The Tooele County Transportation Plan’s approach to guidance for the design of streets is to balance the needs of the four transportation networks into a Complete Streets network. The implementation tool for this Complete Streets Network is a series of Street Types that serve as general design templates for streets that have different needs. These Street Types incorporate all the transportation modes as well as the character of the surrounding community. This means that two streets that may serve the same transportation function may be designed differently if they have different land uses beside them.

The Tooele Valley Street Types are:

- Freeway
- Highway
- Community Spine
- Mobility Connector
- Rural Preservation Connector
- Industrial Connector
- Neighborhood Connector
- Local Street

Figure 4.1 shows the street type designations of key Tooele Valley streets.

The following describes the Street Types in more detail.

How to use this section:

The following chart describes how to interpret each illustration:

Cross section element name: When streets are shown as cross sections, as they are here, they are divided into different elements, such as roadway lanes, sidewalks, and medians. The street types illustrations are comprised of these different cross section elements.

Element priority level: The degree to which the cross section element is important to include in a street of this type.

HI	High priority: An essential element of the street type.
MID	Mid priority: A recommended element that could be left out if there are space constraints.
LO	Low priority: A useful element to consider if there is space.
N	Network-dependent: An element whose inclusion is dependent on a street’s role in the relevant modal network.

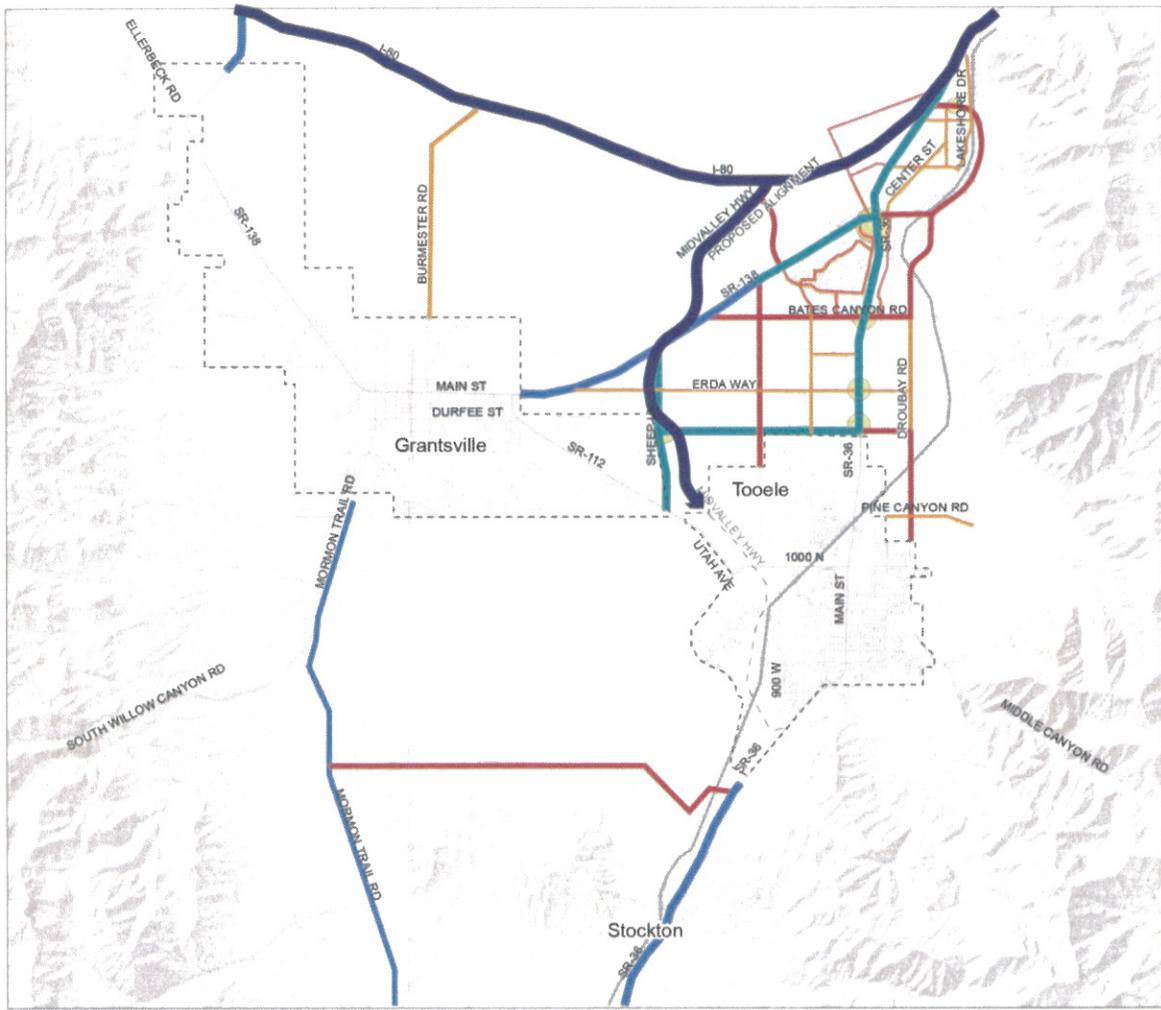
Element mode emphasis: The transportation mode emphasized by the cross section element.

	Pedestrian
	Mixed vehicle traffic
	Parked vehicle
	Transit
	Bicycle
	Mixed emphasis

It is important to note that *each type does not have a universal cross section*. The illustrations in the following guidance are meant to convey ideas on how to construct a street of this type. Each element of the cross section (mixed flow traffic lane, bike lane, sidewalk, median, etc.) is shown in terms of mode, and importantly, its level of priority in the design of the street. While it is vital to include those elements labeled “HI,” it is less so for those labeled “MID,” and so on. Elements labeled “N” are network-dependent – consult the relevant transportation network and assess the current state of the network to determine if that element is needed.

Many Street Types feature a “Standard” cross section template and a “Center” cross section template. The “Center” cross sections are intended to be applied only in the designated activity centers (on the Street Types Map) and the Standard everywhere else.

NOTE: The illustrations are often asymmetrical not to encourage asymmetrical designs but simply to show a range of options in how to design the street.



TOOELE COUNTY TRANSPORTATION PLAN

DRAFT STREET TYPES

- Freeway
- Highway
- Community Spine
- Connector - Mobility
- Connector - Rural Preservation
- Connector - Neighborhood
- Connector - Industrial
- Pedestrian Area/ Activity Center

* Streets not designated in this map may be designated as Connector or Local types at the discretion of the County Engineer.



Data Source: WFRM, Tooele County

Figure 4.1: Street Type designations

Freeway

Intent:

A road providing the highest degree of motor vehicle mobility and very limited access through grade separation, with emphasis on moving vehicle traffic through Tooele Valley as well as around it. The Freeway category currently only includes Interstate 80 but also includes the planned Midvalley Highway.

Examples:

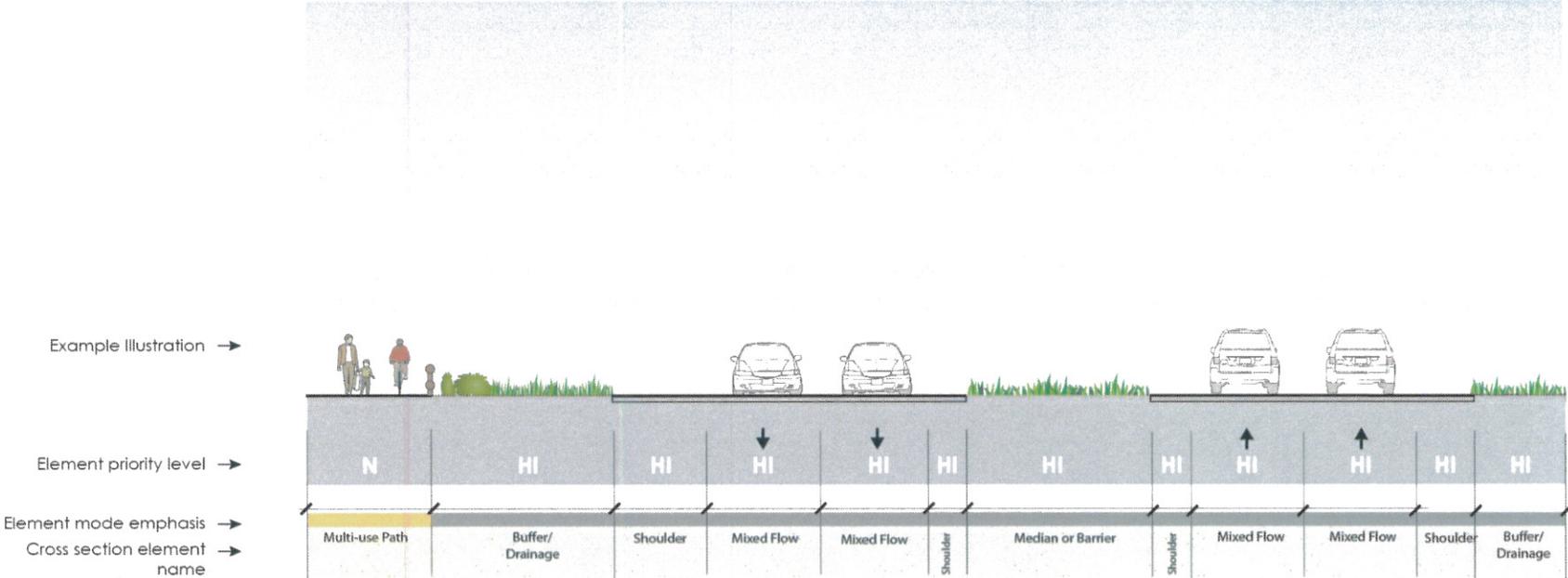
- Midvalley Highway
- I-80

Characteristics:

- Community Context: Any; Freeways do not relate to surrounding context
- Emphasized modes: Vehicles and freight
- Frontage: Buffer, grade separation, and/or sound wall; land uses back on freeway or front onto parallel frontage road.
- Target right-of-way: Determine through specific facility design; see objectives on specific major streets for right-of-way targets.
- Target vehicle speeds: See UDOT standards.
- Mixed-flow lanes: See specific facility.
- On-street parking: Not allowed
- Trucks/Freight: Primary freight routes
- Vehicular classification: Throughway
- Vehicle access to properties: Grade-separated interchange. See UDOT standards for spacing.
- Transit treatments: Mixed flow or dedicated transitway.

- Bicycle treatments: Heavily buffered separated path, see active transportation network designations.
- Pedestrian realm: Heavily buffered separated path, see active transportation network designations.

FREEWAY



Highway

Intent:

A street that connects Tooele Valley communities by providing a high degree of vehicle mobility with limited vehicle access. Highways are intended to run through less populated parts of Tooele Valley with little need for community access.

Examples:

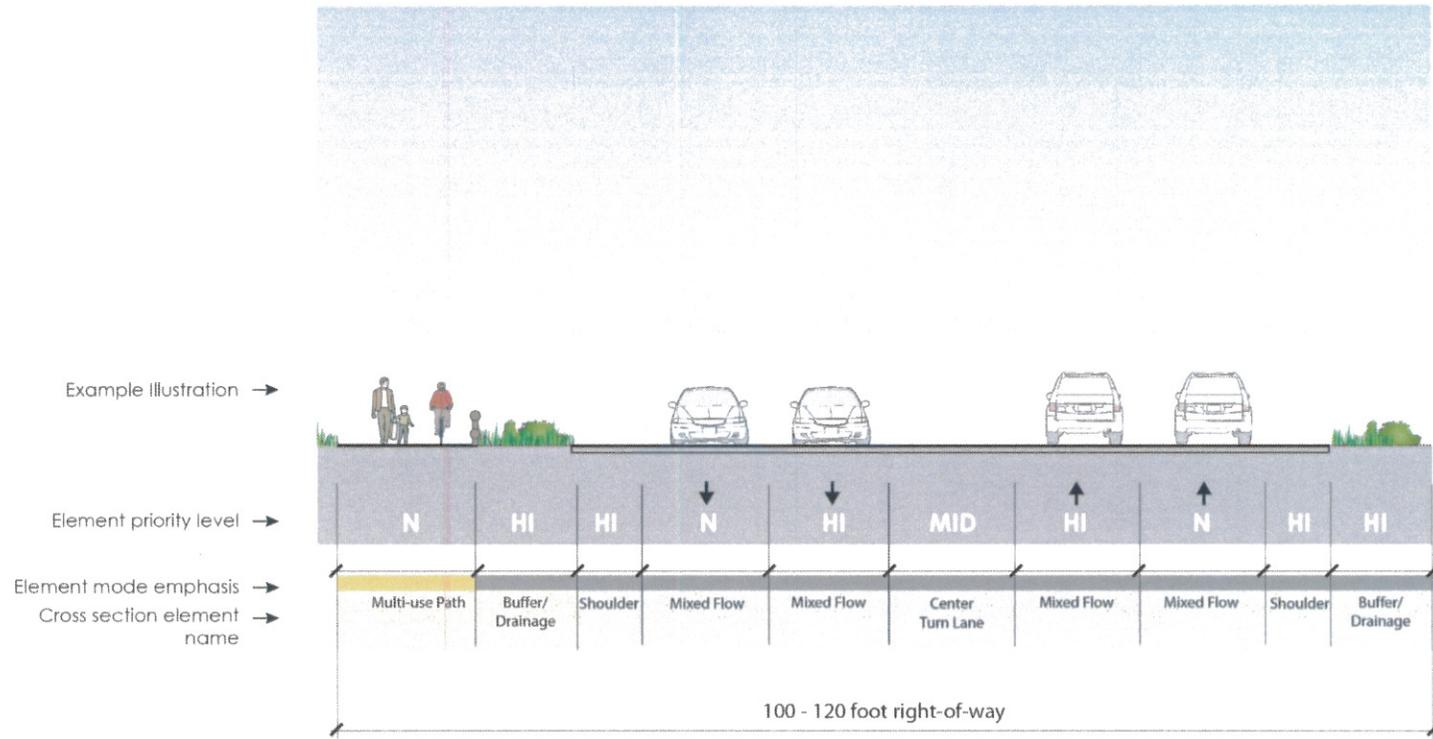
- SR 138
- SR 112
- Mormon Trail
- SR 36 (south of Tooele City)

Characteristics:

- Community Context: Generally less populated areas between communities
- Emphasized modes: Vehicles
- Frontage: Major setback of any buildings; can be fronting or backing, including fronting onto a frontage road.
- Target right-of-way: For county-controlled roads, 100 – 120 feet.
- Target vehicle speeds: See UDOT access management standards for state highways; for county controlled roads, determine on a case by case basis.
- Mixed-flow lanes: 2 through lanes and potential center turn lane where access needed. In some circumstances, 2 additional through lanes could be considered.
- On-street parking: Not allowed
- Trucks/Freight: Secondary freight routes, see network designations.

- Vehicular classification: Arterial
- Vehicle access to properties: Access between properties and the roadway is highly controlled; access recommended to occur via a connecting street of another type. For state controlled roads, see UDOT access management standards.
- Transit treatments: Transit vehicles operating in mixed flow
- Bicycle treatments: Heavily buffered separated path, see active transportation network designations.
- Pedestrian realm: Heavily buffered separated path, see active transportation network designations.

HIGHWAY



Community Spine

Intent:

A street that creates a major regional connection among Tooele Valley communities while also serving a key community function within identified community activity centers. Community Spine streets can be both “highway-like” between centers and “boulevard-like” for stretches within centers, with slower speeds and more pedestrian oriented frontage. However in both cases, one of a community spine’s major jobs is to move people longer distances, both in private automobiles and in public transit.

Examples:

- SR-36 (north of Tooele City)
- Tooele Parkway
- Sheep Lane

Characteristics:

- Community Context:
 - Outside activity centers: Any; disconnected from street itself
 - Inside activity centers: Compact mix of uses creating community center
- Emphasized modes: vehicles and transit; within centers, active transportation
- Frontage:
 - Outside activity centers: land uses set back and fronting; open space desired.
 - Inside activity centers: Land uses fronting street in pedestrian-oriented way, including active building and site entries.

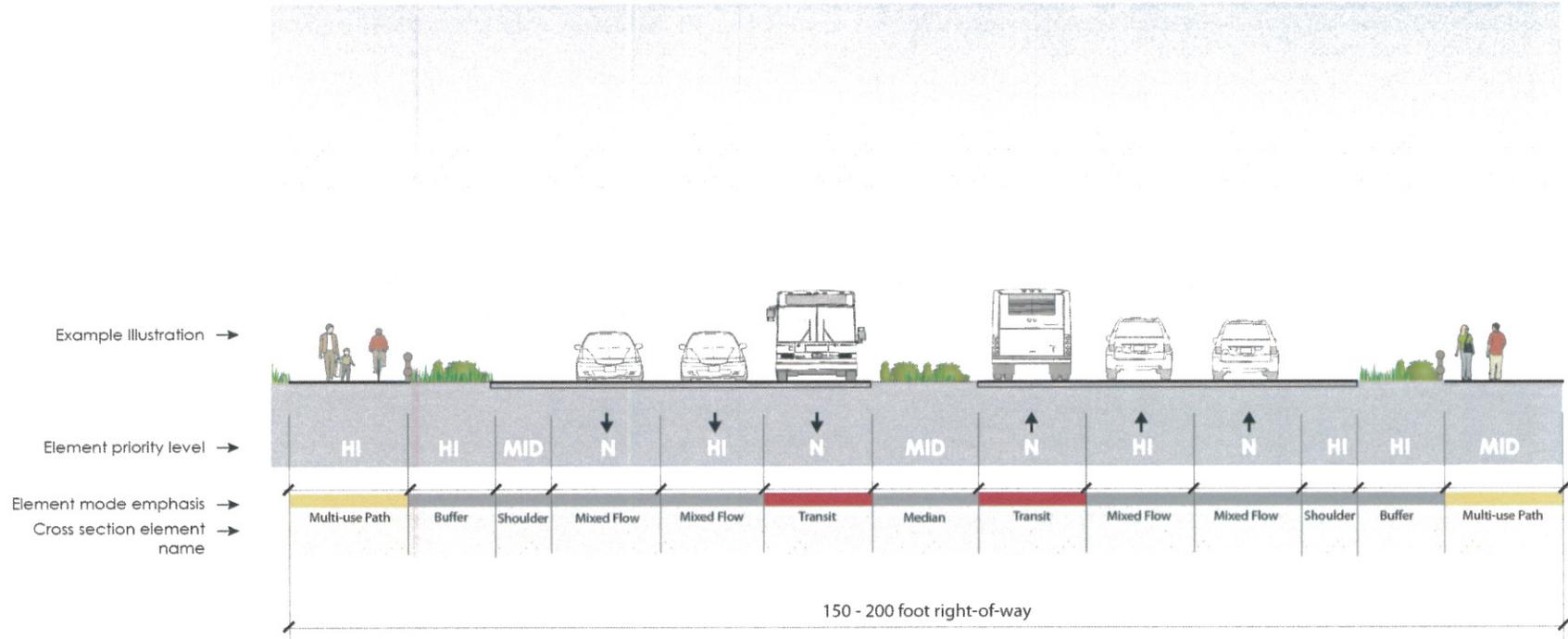
- Target right-of-way: 150 – 200 feet
- Target vehicle speeds:
 - Outside activity centers: 40-55 m.p.h.
 - Inside activity centers: 30-35 m.p.h.
- Mixed-flow lanes:
 - Outside activity centers: 4 through lanes with center turn lane or median with turn pockets; shoulder
 - Inside activity centers: 4 through lanes with center turn lane or median with turn pockets; additional local access lanes recommended for traffic access to destinations.
- On-street parking:
 - Outside activity centers: Typically not allowed
 - Inside activity centers: Recommended to be located on local access lanes; if speed limit reduced, can be located on through lanes.
- Trucks/Freight: Secondary freight routes – alternate regional access and primary community access
- Vehicular classification: Arterial
- Vehicle access to properties:
 - Outside activity centers: Access should be highly limited; Encourage access from connecting streets and alleys, and encourage shared access with adjacent properties. UDOT access management standards. Otherwise, see general access policies for residential area and commercial area in General Street Policies.
 - Inside activity centers: Recommend use of additional local access lanes to provide local traffic access. With lower speed limit, access can be more frequent per UDOT access guidelines.

- Transit treatments: Mixed flow or dedicated transitway on major transit corridors; stations and stops protected from moving traffic by pull-out or dedicated lane. In activity centers, high-quality pedestrian and bicycle access to transit stations and stops.
- Bicycle treatments:
 - Outside activity centers: Class I bicycle path separated by substantial buffer from moving traffic
 - Inside activity centers: Class I bicycle path or bicycle lane if speed reduced to 35 m.p.h.
- Pedestrian realm:
 - Outside activity centers: Pedestrian/multi-use path separated by substantial buffer from moving traffic
 - Inside activity centers: Substantial sidewalk with space for walking, furnishings, landscape, and with close relationship to adjacent land uses; or pedestrian/multi-use path with similar characteristics.

Illustration:

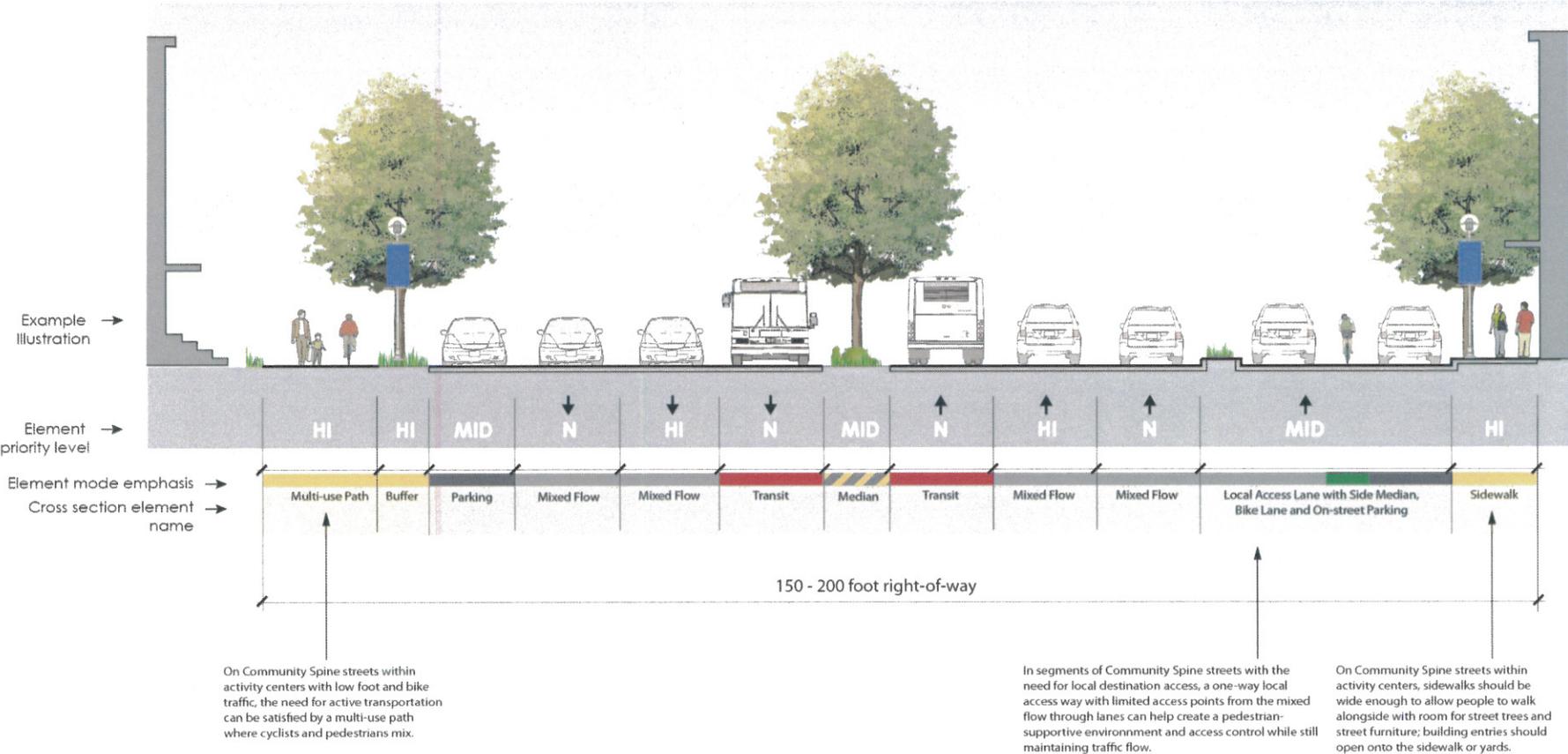
- **Standard:** Use in every situation except within Activity Centers or other situations at the discretion of the County Engineer.
- **Center:** Use within designated Activity Centers.

COMMUNITY SPINE - STANDARD



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

COMMUNITY SPINE - CENTER



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

Mobility Connector

Intent:

A mid-level street that connects Tooele Valley communities to activity centers or larger roads, with an emphasis on moving people longer distances through private vehicles, transit, and active transportation. Within activity centers, Mobility Connectors can be a focus for commercial and civic activities and other uses.

Examples:

- Bates Canyon Rd.
- Saddleback Boulevard
- Droubay Road (north of Bates Canyon; south of Erda Way)
- Pole Canyon
- 1200 West

Characteristics:

- Community Context:
 - Outside activity centers: Variety of lower-density residential and non-residential land uses, including protected open space.
 - Inside activity centers: Mix of more compact residential and non-residential land uses with emphasis on community destinations.
- Emphasized modes: Vehicles, transit, and active transportation
- Frontage:
 - Outside activity centers: Land uses set back and fronting street if possible.

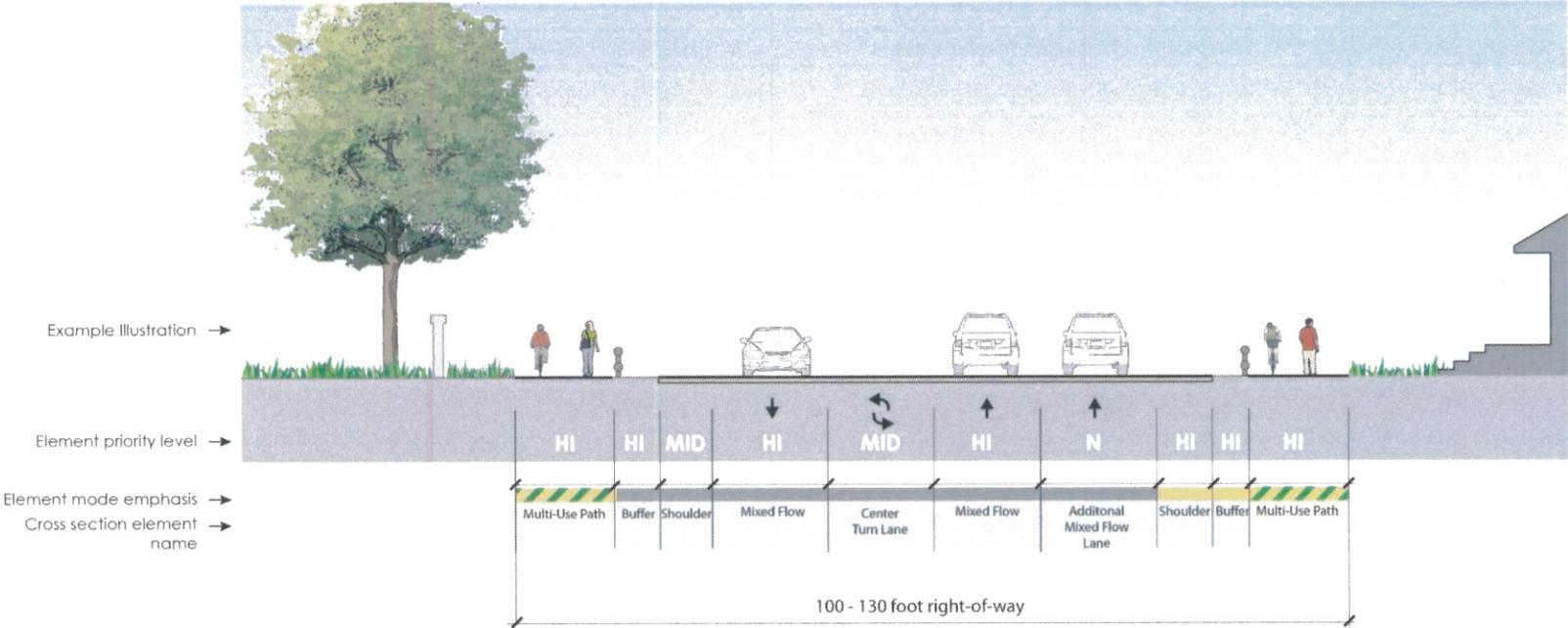
- Inside activity centers: Land uses fronting street in pedestrian-oriented way, including active building and site entries.
- Target right-of-way:
 - Outside activity centers: 100 – 130 feet
 - Inside activity centers: 115 – 130 feet
- Target vehicle speeds:
 - Outside activity centers: 40-55 m.p.h.
 - Inside activity centers: 30-35 m.p.h.
- Mixed-flow lanes: 2 to 4 through lanes with center turn lane or median with turn pockets.
On-street parking:
 - Outside activity centers: Not recommended
 - Inside activity centers: Recommended
- Trucks/Freight: Not designated as freight routes; truck travel discouraged except where deliveries/pickups needed.
- Vehicular classification: Major Collector
- Vehicle access to properties:
 - Outside activity centers: Limit access; discourage direct residential driveway access.
 - Inside activity centers: Recommend shared driveways and vehicle access from side and rear to emphasize pedestrian orientation.
- Transit treatments: Transit vehicles operate in mixed flow.
- Bicycle treatments:
 - Outside activity centers: Separated multi-use path
 - Inside activity centers: Separated path, cycletrack, or bike lane; in cases where speed limit is 25 m.p.h. or lower, shared lane markings.
- Pedestrian realm:
 - Outside activity centers: Pedestrian/multi-use path separated by substantial buffer from moving traffic.

- Inside activity centers: Substantial sidewalk with space for walking, furnishings, landscape, and with close relationship to adjacent land uses; or pedestrian/multi-use path with similar characteristics.

Illustration:

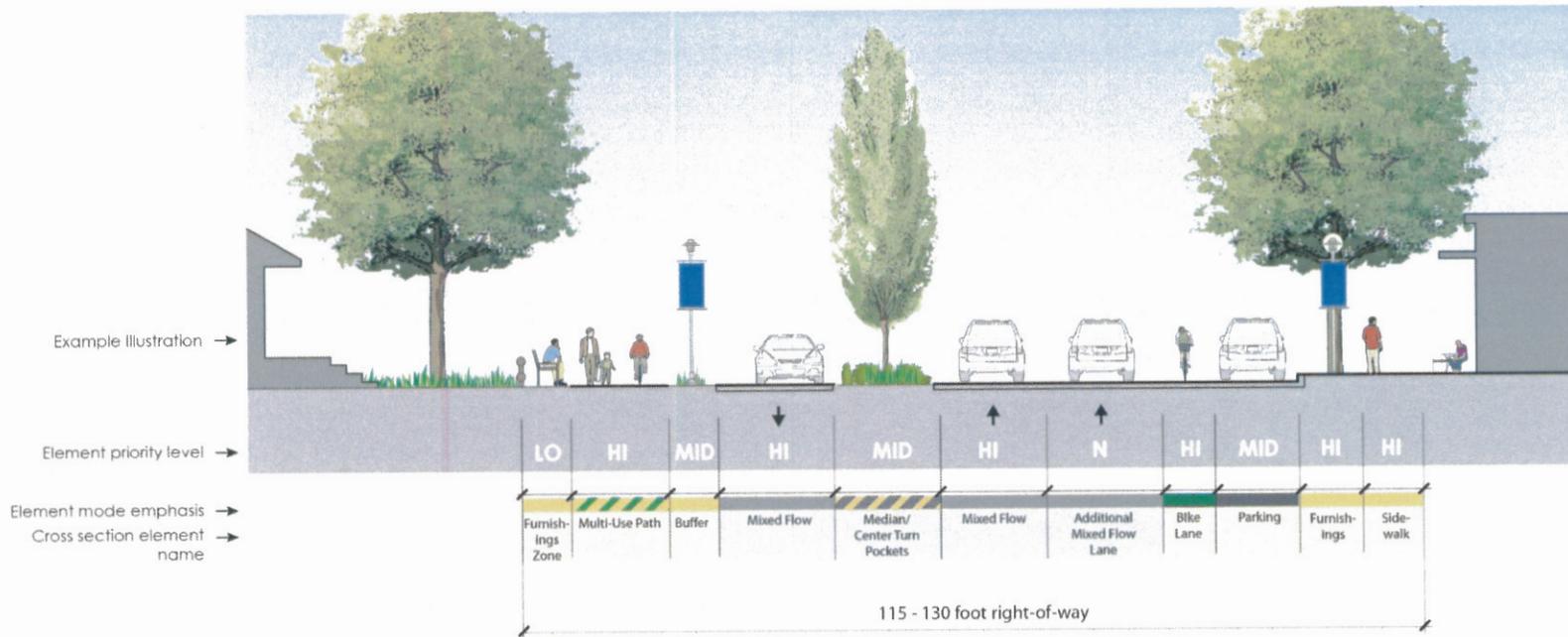
- **Standard:** Use in every situation except within Activity Centers or other situations at the discretion of the County Engineer.
- **Center:** Use within designated Activity Centers.

MOBILITY CONNECTOR - STANDARD



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

MOBILITY CONNECTOR - CENTER



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

Rural Preservation Connector

Intent:

A mid-level street that connects Tooele Valley communities to activity centers or larger roads, with an emphasis on the preservation of the historic rural character of the street corridor. Within activity centers, Rural Preservation Connectors can be a focus for commercial and civic activities and other uses, provided they fit within the established rural character of the corridor. Because of their focus on maintaining the human scale of historic agriculture, Rural Preservation Connectors are recommended for active transportation facilities such as trails and paths.

Examples:

- Erda Way
- Droubay Road (Bates Canyon Rd. to Erda Way)
- 400 West
- Burmester Road
- Center Street
- Canyon Road
- Pine Canyon Road

Characteristics:

- Community Context:
 - Outside activity centers: Historic pattern of farms, homes, and other supporting uses
 - Inside activity centers: Mix of more compact residential and non-residential land uses with emphasis on community destinations, built in a way that is respectful of and compatible with historic rural pattern.

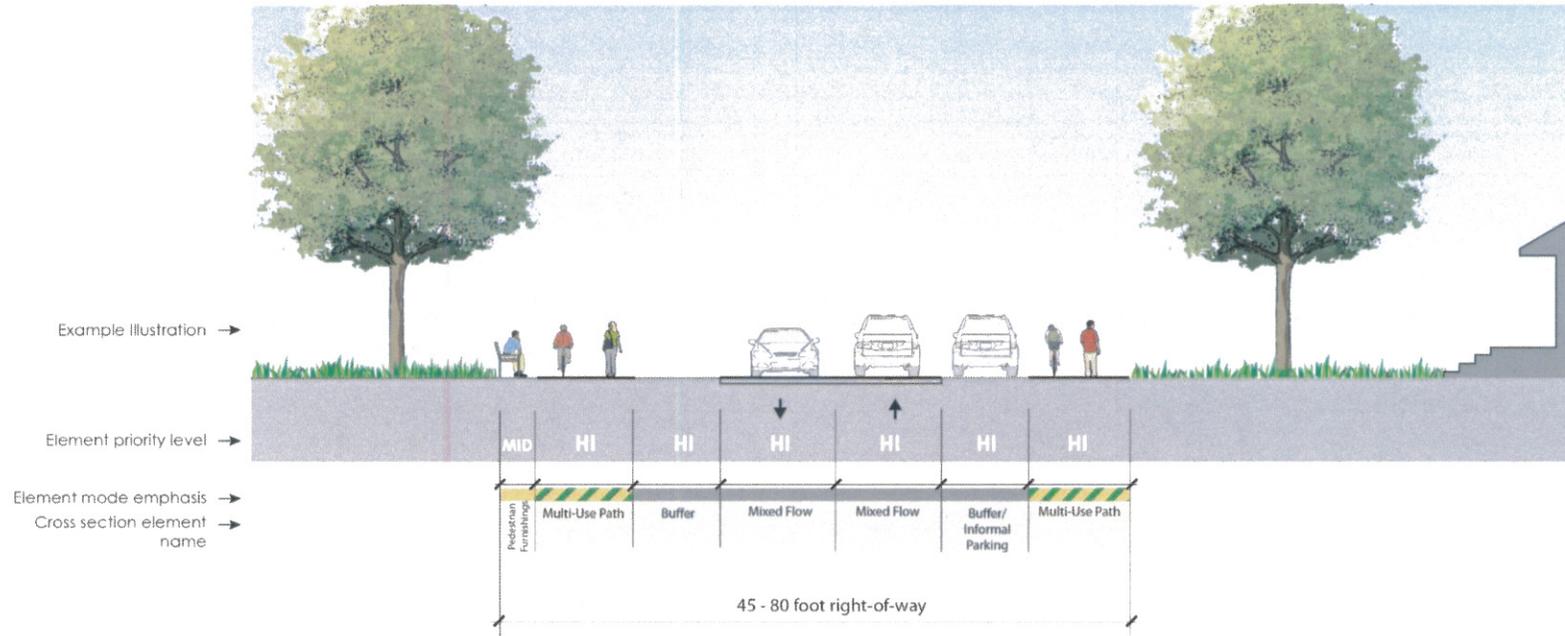
- Emphasized modes: Active transportation, vehicles
- Frontage:
 - Outside activity centers: Historic human-scale relationship of agricultural uses and residences fronting onto a narrow rural roadway.
 - Inside activity centers: Land uses fronting the street in pedestrian-oriented way, including active building and site entries; patterns of historic residences and farms encouraged.
- Target right-of-way:
 - Outside activity centers: 45 – 80 feet
 - Inside activity centers: 70 – 100 feet
- Target vehicle speeds:
 - Outside activity centers: 30-35 m.p.h.
 - Inside activity centers: 25-30 m.p.h.
- Mixed-flow lanes:
 - Outside activity centers: 2 through lanes with no shoulder.
 - Inside activity centers: 2 through lanes with the possibility of a center turn lane or median with center turn pockets.
- On-street parking:
 - Outside activity centers: Can be accommodated in specific places where needed; consider unpaved parking pull-outs to keep with rural corridor character.
 - Inside activity centers: Encouraged.
- Trucks/Freight: Discouraged except where deliveries/pickups needed.
- Vehicular classification: Minor Collector
- Vehicle access to properties:

- Outside activity centers: Manage access in a safe way that emphasizes pedestrians and human scale but historic pattern of frequent driveways and residential accesses is accommodated.
- Inside activity centers: Recommend shared driveways and vehicle access from side and rear to emphasize pedestrian orientation.
- Transit treatments: Transit is de-emphasized on these streets but where present, transit vehicles operating in mixed flow traffic. Transit stops blend in to rural character of the corridors.
- Bicycle treatments: Bicycle travel is heavily emphasized on Rural Preservation Connector streets.
 - Outside activity centers: Separated multi-use path for all riders; riding in roadway for advanced riders.
 - Inside activity centers: Separated path, cycletrack, or bike lane; in cases where speed limit is 25 m.p.h. or lower and no other option available, shared lane markings.
- Pedestrian realm:
 - Outside activity centers: Separated multi-use path.
 - Inside activity centers: Substantial sidewalk with space for walking, furnishings, landscape, and with close relationship to adjacent land uses; or pedestrian/multi-use path with similar characteristics.

Illustration:

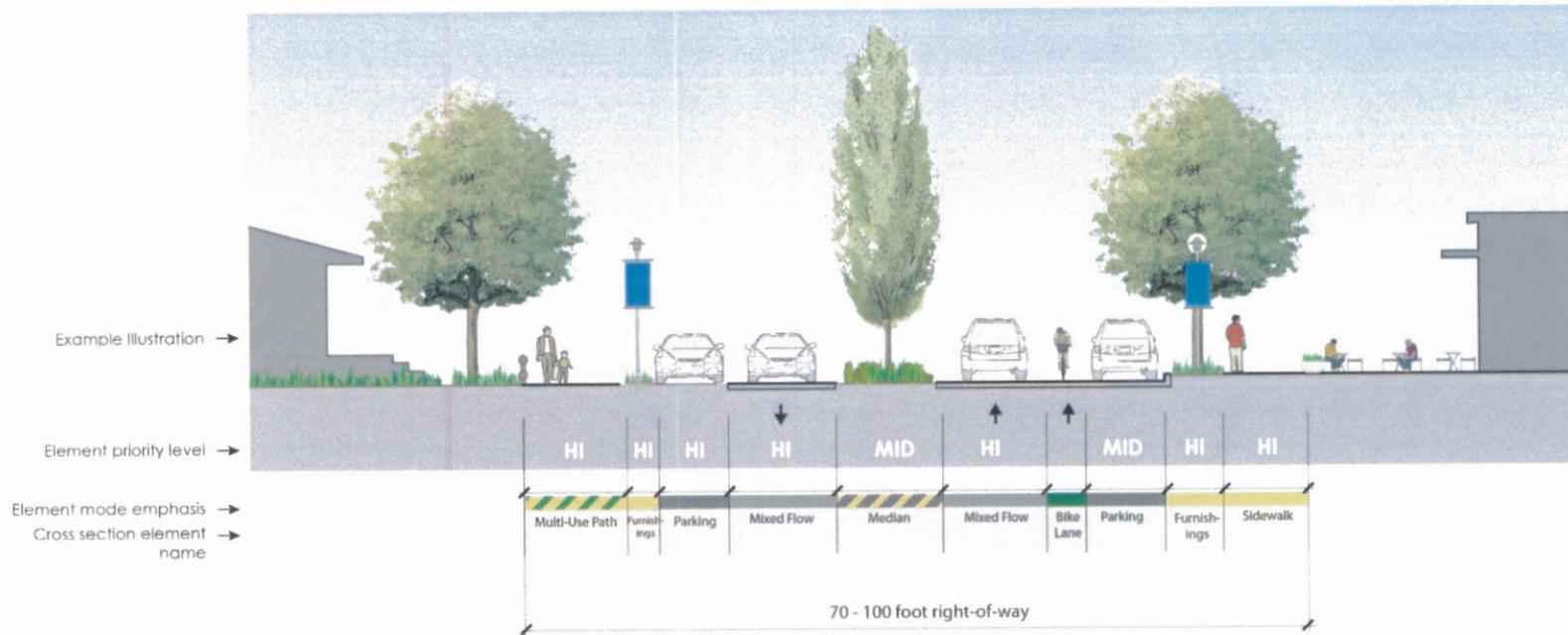
- **Standard:** Use in every situation except within Activity Centers or other situations at the discretion of the County Engineer.
- **Center:** Use within designated Activity Centers.

RURAL PRESERVATION CONNECTOR - STANDARD



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

RURAL PRESERVATION CONNECTOR - CENTER



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

Industrial Connector

Intent:

A mid-level street that connects Tooele Valley industrial and freight centers to larger roads and freight routes, with an emphasis on moving large trucks.

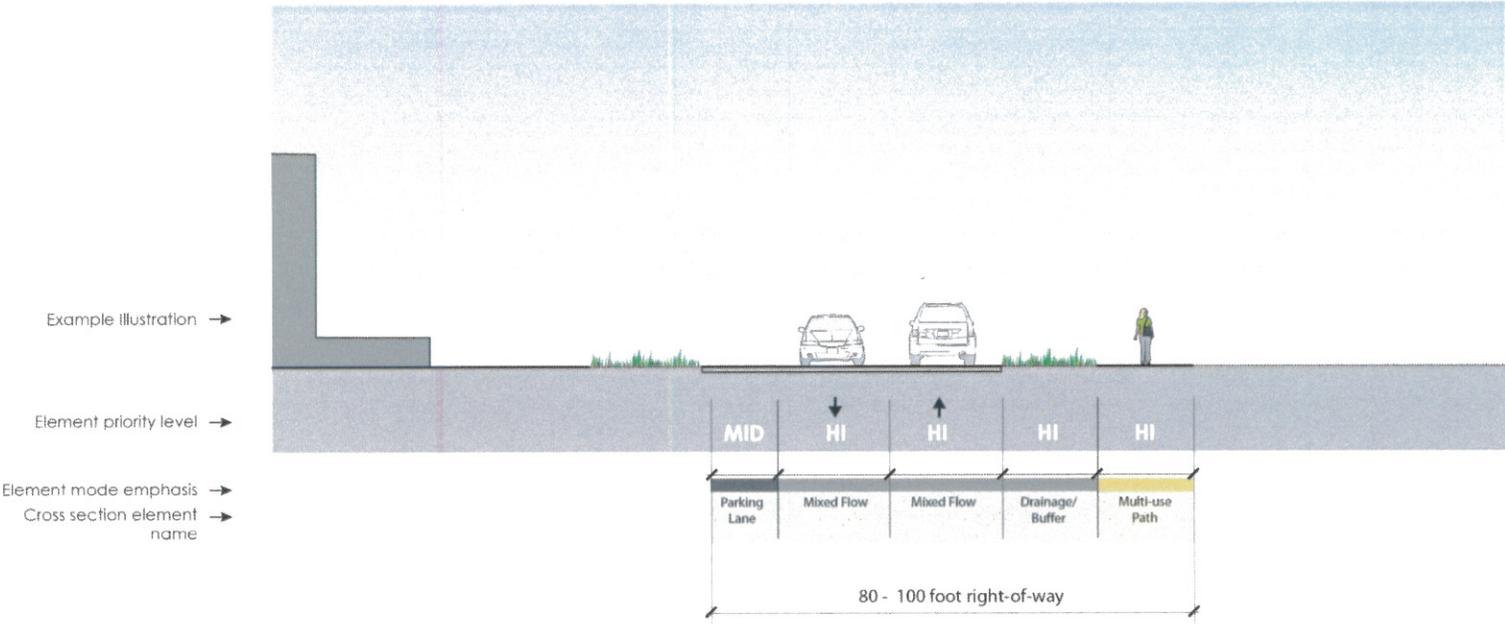
Examples:

- Hardy Rd.

Characteristics:

- Community Context: Industrial and warehousing areas
- Emphasized modes: Vehicles and trucks
- Frontage: Any
- Target right-of-way: 80 – 100 feet
- Target vehicle speeds: 30 m.p.h. to 40 m.p.h.
- Mixed-flow lanes: 2 though lanes with potential for center turn lane or median with turn pockets; lanes should have extra width for trucks
- On-street parking: Discouraged
- Trucks/Freight: Trucks emphasized; secondary freight routes linking freight centers to primary freight routes.
- Vehicular classification: Minor Collector
- Vehicle access to properties: Emphasize trucking access to properties; accesses can be as frequent as needed.
- Transit treatments: Transit de-emphasized; if present, transit vehicles run in mixed flow.
- Bicycle treatments: Separated multi-use path depending on available space.
- Pedestrian realm: Separated multi-use path or sidewalk.

INDUSTRIAL COLLECTOR



Neighborhood Connector

Intent:

A mid-level street that provides circulation within more urban communities for private vehicles, transit, and active transportation. Generally, Neighborhood Connectors have a more residential character, but within activity centers, these streets can include commercial and civic activities and other uses.

Examples:

- Village Boulevard
- Other Stansbury Park collector-level streets (i.e. Stansbury Parkway and Country Club)

Characteristics:

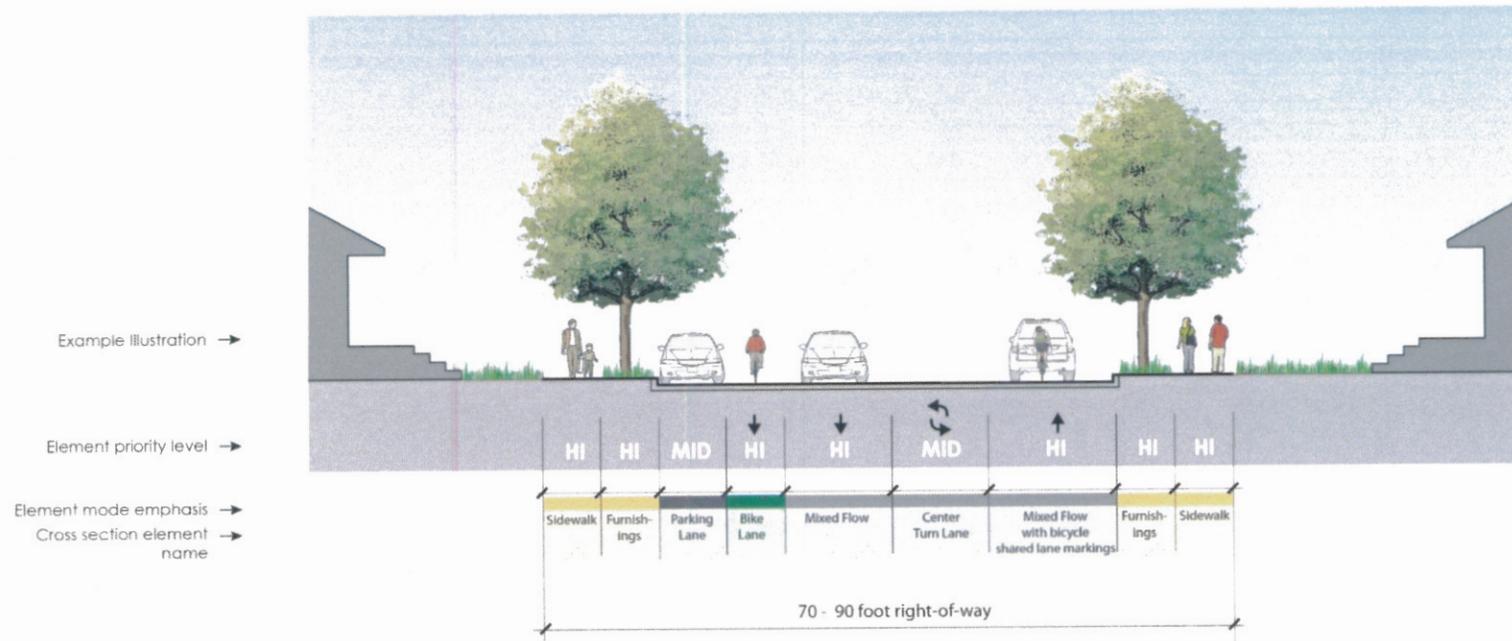
- Community Context:
 - Outside activity centers: Residential neighborhood.
 - Inside activity centers: Mix of more compact residential and non-residential land uses with emphasis on community destinations.
- Emphasized modes: Active transportation, vehicles, transit.
- Frontage:
 - Outside activity centers: Land uses, generally homes, fronting on the street.
 - Inside activity centers: Land uses fronting street in pedestrian-oriented way, including active building and site entries.
- Target right-of-way:
 - Outside activity centers: 70 – 90 feet
 - Inside activity centers: 80 – 90 feet
- Target vehicle speeds: 25 – 30 m.p.h.

- Mixed-flow lanes: 2 through lanes with potential for center turn lane or medians and center turn pockets.
- On-street parking: Recommended
- Trucks/Freight: Discouraged except where deliveries/pickups needed.
- Vehicular classification: Minor Collector.
- Vehicle access to properties:
 - Outside activity centers: Frequent residential driveways accommodated.
 - Inside activity centers: Rear access to properties via alleys and parking in back or at side encouraged, otherwise frequent residential driveways accommodated.
- Transit treatments: Transit vehicles run in mixed flow traffic.
- Bicycle treatments: Dedicated bicycle lane with shared lane markings an option if space is constrained and speed limit is 25 m.p.h. or lower.
- Pedestrian realm:
 - Outside activity centers: Sidewalk with space for walking and landscape; or pedestrian/multi-use path with similar characteristics.
 - Inside activity centers: Substantial sidewalk with space for walking, furnishings, landscape, and with close relationship to adjacent land uses; or pedestrian/multi-use path with similar characteristics.

Illustration:

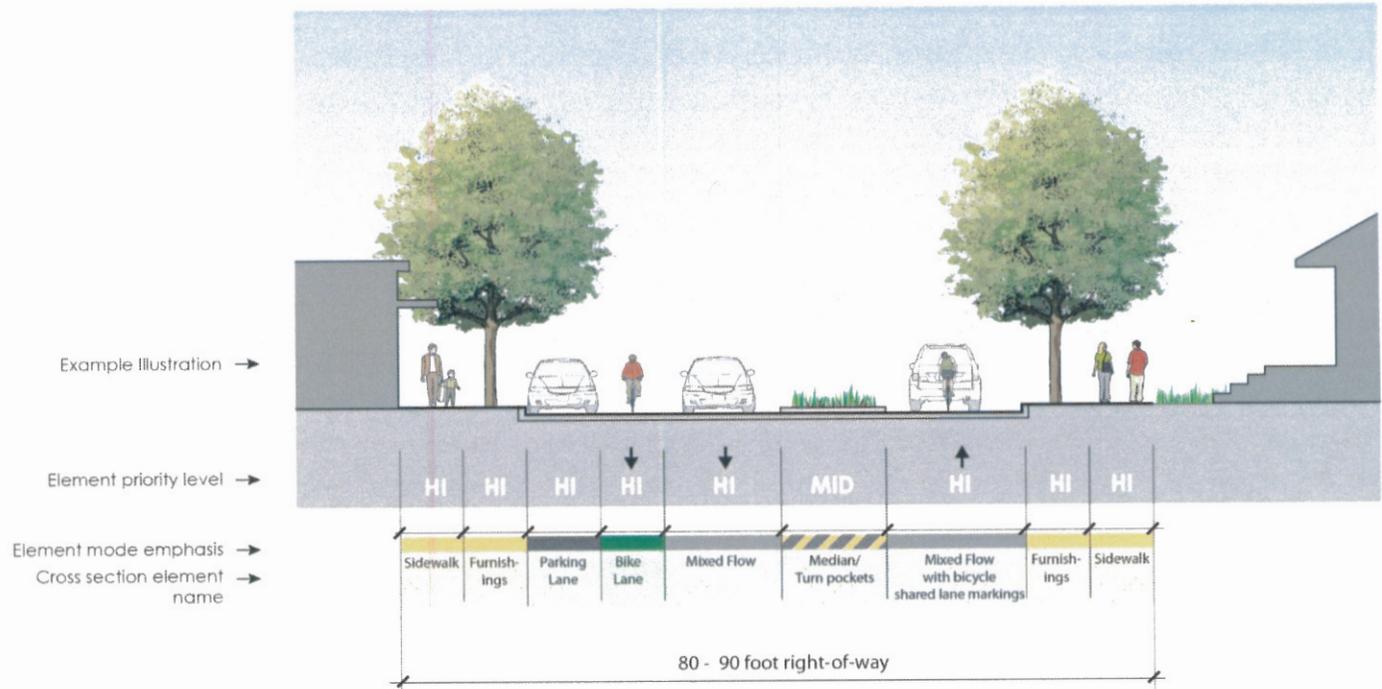
- **Standard:** Use in every situation except within Activity Centers or other situations at the discretion of the County Engineer.
- **Center:** Use within designated Activity Centers.

NEIGHBORHOOD CONNECTOR - STANDARD



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

NEIGHBORHOOD CONNECTOR - CENTER



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

Local Street – Higher Density

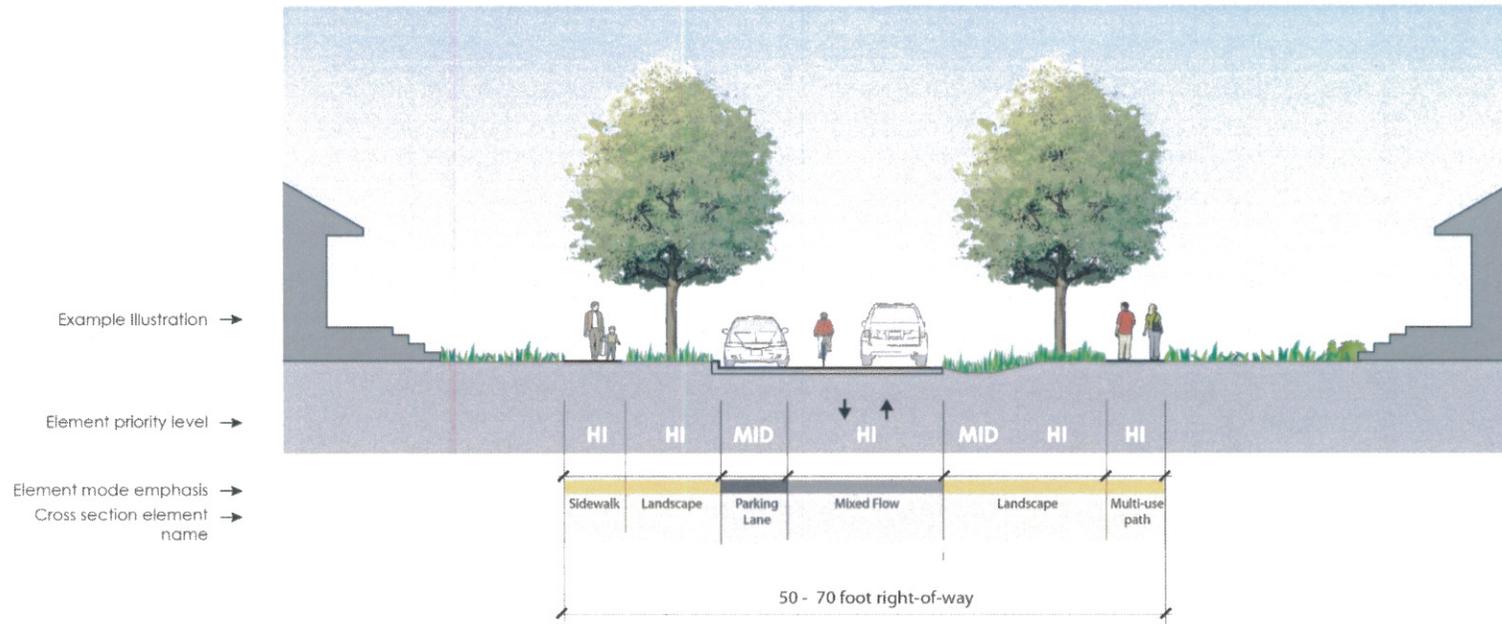
Intent:

A street primarily providing direct access to higher density (one unit per half acre or above) residences or other higher density land uses.

Characteristics:

- Community Context:
 - Outside activity centers: Primarily residential neighborhoods, though this street type may be used for local streets in commercial, institutional, and industrial areas as well.
 - Inside activity centers: Mix of more compact residential uses with the potential for non-residential land uses and community destinations.
 - Emphasized modes:
 - Inside activity centers and in residential neighborhoods: active transportation.
 - In commercial and institutional areas: mix of vehicles and active transportation.
 - In industrial areas: freight and vehicles.
 - Frontage:
 - Outside activity centers: Land uses, generally homes, fronting on the street.
 - Inside activity centers: Land uses fronting street in pedestrian-oriented way, including active building and site entries.
 - Target right-of-way: 50 – 70 feet
 - Target vehicle speeds: 25 m.p.h. or below.
 - Mixed-flow lanes: No defined lanes but enough room for two way travel.
- On-street parking: Strongly recommended.
 - Trucks/Freight: Strongly discouraged except in circumstances in activity centers where deliveries/pickups needed.
 - Vehicular classification: Local
 - Vehicle access to properties:
 - Outside activity centers: Driveways or on-street parked access
 - Inside activity centers: Rear access to properties via alleys and parking in back or at side encouraged, otherwise frequent residential driveways accommodated.
 - Transit treatments: Transit not encouraged but if present, transit vehicles run in mixed flow traffic; stops designed to be compatible from residences.
 - Bicycle treatments: Generally shared lane markings.
 - Pedestrian realm: Sidewalk with space for walking and landscape; or pedestrian/multi-use path with similar characteristics.

LOCAL STREET



NOTE: Difference in Illustration's two sides of the street intended to show different design options.

Local Street – Lower Density

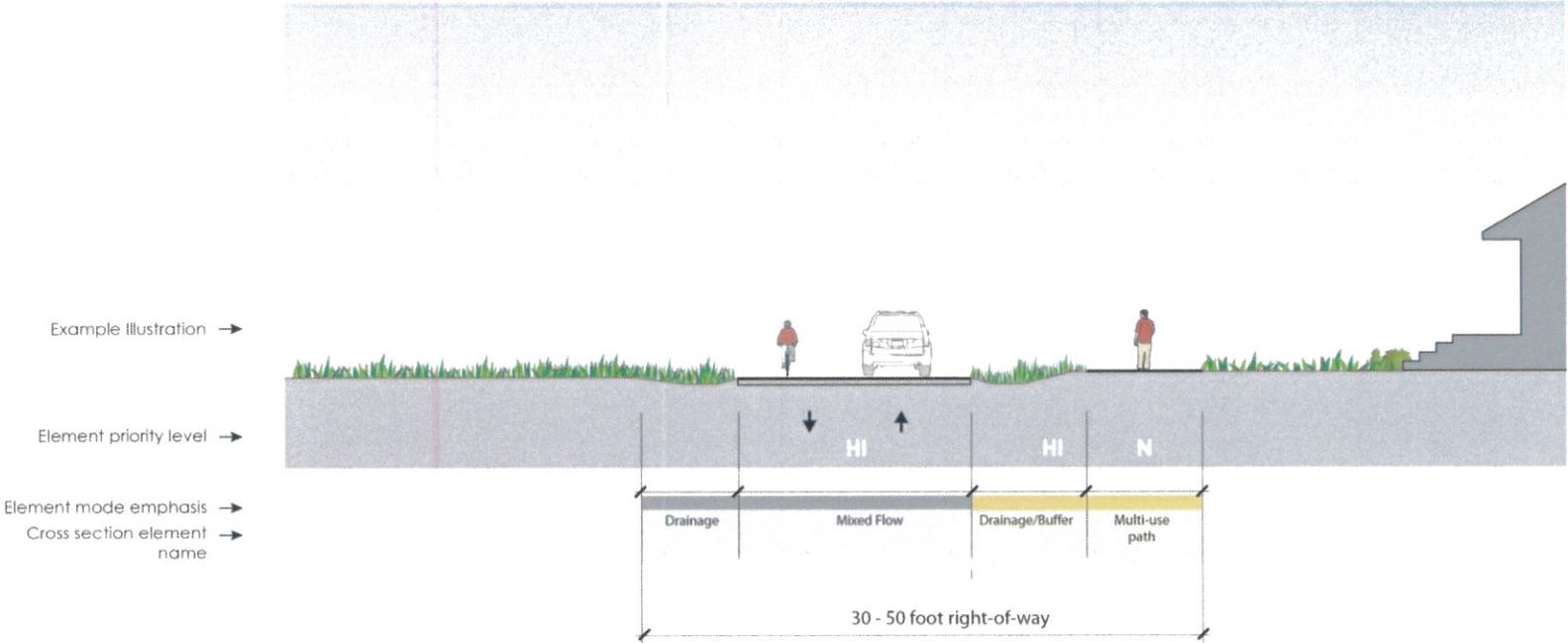
Intent:

A street primarily providing direct access to lower density (generally below one unit per half acre) residences, agriculture, or other lower density land uses.

Characteristics:

- Community Context: Residential areas built to below one unit per half acre or other low density land uses such as agriculture.
 - Emphasized modes: Vehicles and active transportation.
 - Frontage: Open space or homes
 - Target right-of-way: 30 – 50 feet
- Target vehicle speeds: 25 m.p.h. or below.
 - Mixed-flow lanes: No defined lanes but enough room for two way travel.
 - On-street parking: Not recommended.
 - Trucks/Freight: Strongly discouraged except in industrial areas.
 - Vehicular classification: Local
 - Vehicle access to properties:
 - Outside activity centers: Driveways
 - Transit treatments: Transit not encouraged.
 - Bicycle treatments: Generally share roadway informally with vehicles.
 - Pedestrian realm: Option for multi-use path. Generally, pedestrians need to be accommodated within the roadway.

LOCAL STREET - LOW DENSITY RESIDENTIAL



5 | Projects

The final section of the Tooele County Transportation Plan is a list of planned projects for the two identified phases, Phase 1 - 2016-2024 and Phase 2 - 2025-2040. While the phases are clearly defined, Tooele County will watch how growth occurs and work opportunistically with other partners to find the right time to pursue these projects.

Project Name	Phase	Description	Street Type	Vehicle Network	Freight Network	Transit network	Active Transportation Network
Saddleback Blvd/Droubay Road Extension	1	An extension of Droubay Road around the UP railroad tracks to meet up with an extension of Saddleback Boulevard via a grade-separated crossing of the railroad. Includes improvement of the roundabout and development of a walkable street if and when activity center is developed in roundabout area.	Mobility Connector	Major Collector		Crosses potential future transit hub at potential Saddleback village center	Active Transportation Route
Midvalley Highway Phase 1	1	The first phase of the Midvalley Highway grade separated freeway project from Interstate 80 to SR-138 and connecting to an improved Sheep Lane.	Freeway	Freeway	Primary Freight Route		Active Transportation Route
I-80 improvements	1	Widening of Interstate 80 to 6 lanes between SR-36 interchange and SR-201 interchange.	Freeway	Freeway	Primary Freight Route		
Pole Canyon Road Realignment and Improvement	1	Realign a piece of Center Street to become Pole Canyon Road and connect to the extension of Droubay Road.	Mobility Connector	Major Collector			Active Transportation Route
400 West Improvement	1	From Bates Canyon Road to the Tooele City border, realign portions of the Toms Lane/ Cochrane Lane/ 400 West route to be straight and standardize the road cross section.	Rural Preservation Connector	Minor Collector			Active Transportation Route

Village Boulevard Extension	1	Extend Village Boulevard from SR-138 to connect to Midvalley Highway	Mobility Connector	Major Collector			Active Transportation Route
Sheep Lane Improvement	1	Improvement of Sheep Lane to a 5-lane street that connects to Midvalley Highway	Community Spine	Arterial	Primary Freight Route		Active Transportation Route
Salt Pointe Access: Canyon Road Extension, Beaman Way; I-80 underpass; Connect to Hardy Road	1	A series of improvements that create an alternative access to the planned Salt Pointe industrial park. The route turns off SR-36 at an extension of Canyon Way, turns north at Beaman Way then goes underneath I-80 to meet Hardy Road.	Industrial Connector	Minor Collector	Secondary Route; Access to planned freight center		Active Transportation Route
Beaman Way Improvement	1	Improve Beaman Way south of the Canyon Road extension.	Neighborhood Connector	Minor Collector	Secondary Route; Access to planned freight center		Active Transportation Route
Hardy Road Extension/Improvement	1	Improve Hardy Road through the planned Salt Pointe industrial park.	Industrial Connector	Minor Collector	Secondary Route; Access to planned freight center		Active Transportation Route
SR-36 Frontage Road	1	Build frontage road east of SR-36 from Bates Canyon Road north to new Pole Canyon Road alignment.	Industrial Connector/ Neighborhood Connector	Minor Collector			
Valley Spine Trail North Segment: Mountain View Rd, Center Street, and S.R. 36 crossing	1	Build a separated multi-use path from the planned Saddleback Village Center south to Stansbury Park as part of the valleywide spine trail, using the route identified in the Active Transportation Network.	Rural Preservation Connector; crossing of Community Spine				Active Transportation Route

Valley Spine Trail Central Segment: "Sound Wall" Trail; Village Road; Stallion Way.	1	Build a separated multi-use path from the Stansbury Park transit hub at Mills Junction south to Bates Canyon Road as part of the valleywide spine trail, using the route identified in the Active Transportation Network.	Neighborhood Connector				Active Transportation Route
Valley Spine Trail South Segment: Rabbit Lane; Church Road; 400 West.	1	Build a separated multi-use path from Bates Canyon Road south to 1000 North in Tooele City as part of the valleywide spine trail, using the route identified in the Active Transportation Network. Work with Tooele City to build the portion within the incorporated city.	Rural Preservation Connector				Active Transportation Route
Erda Way Trail	1	Build a separated multi-use path along Erda Way from Grantsville/Sheep Lane to Droubay Road.	Rural Preservation Connector				Active Transportation Route
Erda Way Transit Hub	1	Work with UTA to purchase/lease property and build a transit center and park and ride lot at Erda Way and SR-36 in a location and manner where it can evolve as a community hub.	Community Spine/Rural Preservation Connector			Near Term Transit Hub	Active Transportation Route
Stansbury Park Transit Hub	1	Work with UTA to evaluate effectiveness of Stansbury Park park and ride lot as a long-term transit hub, and either expand it or build a new transit center and park and ride lot where it can evolve as a community hub.	Community Spine			Near Term Transit Hub	Active Transportation Route

Droubay Road Trail	1	Build a separated multi-use path along Droubay Road from 1000 North to Bates Canyon Road to join with trail on Droubay extension.	Mobility Connector/ Rural Preservation Connector				Active Transportation Route
Stansbury Park Neighborhood Bike Improvements	1	Build bike lanes or other bike facilities, bike crossings, and route signage on designated Stansbury Park Phase 1 Active Transportation Routes including Village Boulevard and Lakeside Drive, Lakeview Drive, and Clubhouse Drive.	Neighborhood Connector				Active Transportation Route
Sheep Lane - 1000 North Trail Improvements	1	Improve the trail between the Sheep Lane/SR 112 trailhead and Utah Ave.	N/A				Active Transportation Route
Midvalley Highway Phase 2	2	The second phase of the Midvalley Highway grade separated freeway project from SR-138 to SR 112.	Freeway	Freeway	Primary Freight Route		
I-80 improvements	2	Widening of Interstate 80 to 6 lanes between Midvalley Highway interchange and SR-36 Interchange.	Freeway	Freeway	Primary Freight Route		
Bates Canyon Road improvements and extension	2	Improvement of Bates Canyon Road and extension to SR 138.	Mobility Connector	Major Collector			Active Transportation Route
1200 West Improvements and Extension	2	Improvement of 1200 West and extension from Tooele City to SR-138. Work with Tooele City to create connection to the south.	Mobility Connector	Major Collector			Active Transportation Route
Tooele Parkway	2	Plan, design and build new major street from Droubay Road west to connect with Midvalley Highway and/or Sheep Lane.	Community Spine	Arterial			Active Transportation Route

S.R. 36 Town Center Improvements	2	Within designated activity centers, convert SR-36 to a boulevard type street with slower vehicle speeds and a more urban approach to sidewalks and bicycle infrastructure.	Community Spine	Arterial	Secondary Freight Route	Primary Transit Corridor	Active Transportation Route
S.R. 36 Active Transportation path	2	Build a consistent multi-use path along SR-36 that weaves through the activity centers (where it may turn into bike lanes and sidewalks).	Community Spine				Active Transportation Route
SR-36 high capacity transit corridor	2	Study the possibility of a high-capacity transit service along SR-36 and connecting to Salt Lake Valley.	Community Spine			Primary Transit Corridor	Active Transportation Route
1200 West trail north of S.R. 138	2	Build recreational trail extending north from 1200 West and SR 138. May include trailhead with parking.	N/A				Active Transportation Route
Schooner Lane trail extension north of S.R. 138	2	Build recreational trail extending north from Schooner Lane and SR 138. Include connection to Schooner Lane and wayfinding to connect to Active Transportation Network. May include trailhead with parking.	N/A				Active Transportation Route
Church Road/Bryan Road Trail	2	A separated multi-use path on Church Road and Bryan Road, using a segment of SR-36 to connect. Will need a way to cross SR-36.	Rural Preservation Connector				Active Transportation Route

Saddleback Transit Hub	2	Work with UTA to purchase/lease property and build a transit center and park and ride lot at Saddleback Boulevard in a location and manner where it can evolve as a community hub.	Mobility Connector			Near Term Transit Hub	Active Transportation Route
Bates Canyon Transit Hub	2	Work with UTA to purchase/lease property and build a transit center and park and ride lot at Bates Canyon Road and SR-36 in a location and manner where it can evolve as a community hub.	Community Spine/ Mobility Connector			Near Term Transit Hub	Active Transportation Route
Parkway Transit Hub	2	Work with UTA to purchase/lease property and build a transit center and park and ride lot at Tooele Parkway and SR-36 in a location and manner where it can evolve as a community hub.	Community Spine/ Mobility Connector			Near Term Transit Hub	Active Transportation Route
Oquirrh Foothill Trail	Vision	Plan and build a recreational trail from Lake Point to Tooele City along the Oquirrh foothills, with a connection to the trail head on Droubay Road near Pine Canyon.	N/A				Key long-term connection

MEDIAN VALUE

The median home value in Tooele County is \$159,507. Median home values in the Tooele Valley are similar to those in the County at \$156,728, while the median home value for homes in municipalities outside of the Valley is significantly lower, at \$71,356.² Lower home values result in higher affordability rates in the County, as is analyzed further in the following affordability analysis.

Table 3-5: Median Home Values
(Source: Tooele County Assessor’s Office; ZBPF)

Location	Median Home Value
Tooele Valley	\$156,728
Grantsville	\$197,628
Lake Point	\$245,535
Ophir	\$109,274
Rush Valley	\$104,477
Stansbury Park	\$211,888
Stockton	\$112,105
Tooele City	\$135,118
Remaining County	\$71,356
Vernon	\$100,988
Wendover	\$57,230
Unincorporated County	\$259,042
Tooele County	\$159,507

The median home value varies significantly by the year the home was built. Homes built during the 1990s have a median value of \$164,420, which is approximately \$30,000 less than homes built

² Tooele Valley includes the following municipalities or communities: Grantsville, Lake Point, Ophir, Rush Valley, Stansbury Park, Stockton, and Tooele City.

between 2000 and 2009, and nearly \$80,000 less than homes built in the last 5 years.

Table 3-6: Median Home Value by Decade Built
(Source: Tooele County Assessor’s Office; ZBPF)

Median Home Values by Decade	
No Year	\$94,699
Pre 1900	\$109,575
1900-1949	\$104,669
1950-1959	\$110,400
1960-1969	\$128,969
1970-1979	\$138,739
1980-1989	\$168,504
1990-1999	\$164,420
2000-2009	\$195,680
2010-2015	\$249,480

VACANCY RATE

Tooele County has an overall vacancy rate of 7.1 percent, which is lower than the State vacancy rate of 10.3 percent. A low vacancy rate is an indication for demand in Tooele County. The average vacancy rate for municipalities in the Tooele Valley is about 6 percent, compared to 19 percent for municipalities outside of the Valley.³ The vacancy rate in unincorporated areas is 9 percent.

Table 3-7: Tooele County Vacancy Rates
(Source: ACS 5-year Estimate, 2013)

	Total Housing Units	Occupied Housing Units	Vacant Rate
Tooele Valley	14,327	13,479	5.92%
Grantsville	3,050	2,861	6.20%

³ Does not include homes in unincorporated areas.

	Total Housing Units	Occupied Housing Units	Vacant Rate
Ophir	35	5	85.70%
Rush Valley	223	208	6.70%
Stockton	253	247	2.40%
Tooele City	10,766	10,158	5.60%
Remaining County	621	501	19.32%
Vernon	94	77	18.10%
Wendover	527	424	19.50%
Balance of Tooele County	4,728	4,301	9.03%
Tooele County	19,676	18,281	7.09%
Utah	988,571	886,770	10.30%

HOUSING TENURE

75 percent of homes in the Tooele Valley are owner occupied; however, only 34 percent of units outside of the Valley are owner occupied.⁴

**Table 3-8: Tooele County Housing Tenure
(Source: ACS 5-year Estimate, 2013)**

	Occupied Housing Units	Owner Occupied	% Owner Occupied
Tooele Valley	13,479	10,147	75.28%
Grantsville	2,861	2,379	83.20%
Ophir	5	5	100.00%
Rush Valley	208	184	88.50%
Stockton	247	192	77.70%
Tooele City	10,158	7,387	72.70%
Remaining County	501	171	34.13%
Vernon	77	64	83.10%
Wendover	424	107	25.20%

⁴ Does not include homes in unincorporated areas.

Balance of Tooele County	4,301	3,435	79.90%
Tooele County	18,281	13,753	75.20%
Utah	886,770	621,854	70.10%

FUTURE HOUSING SUPPLY

PROJECTIONS

The population in Tooele County is projected to increase from 66,782 in 2015 to 127,340 in 2040, based on projections from UDOT.⁵ Projections indicate an additional 61,558 people between 2015 and 2040 will require housing in Tooele County. Population projections are based on past population growth trends. Actual numbers could be greater if technological advances resolve current growth constraints, including water and sanitation.

**Table 3-9: Population Projections
(Source, UDOT; ZBPF)**

	2015	2020	2030	2040
Tooele Valley	62,425	70,918	91,400	118,540
Grantsville	10,198	11,794	16,216	22,139
Lake Point	1,266	1,400	1,633	1,880
Ophir	39	41	45	50
Rush Valley	451	457	477	502
Stansbury Park	8,998	9,145	9,290	9,537
Stockton	687	771	966	1,192
Tooele City	35,367	39,839	49,855	63,183
Unincorporated Tooele Valley	5,419	7,471	12,917	20,057
Remaining County	3,356	3,963	5,523	8,800
Vernon	248	252	268	319

⁵ Traffic Analysis Zone (TAZ) projections are based on data from the Governor's Office of Management and Budget

	2015	2020	2030	2040
Wendover	1,576	1,779	2,240	2,818
Remaining Tooele County	1,533	1,931	3,014	5,663
TOTAL	65,782	74,881	96,922	127,340

Based on the average persons per household for each of the communities and the County, about 19,557 additional households will be created between 2015 and 2040, or an average of 782 households per year. Determinations will need to be made on how to best accommodate this growth if it occurs.

Table 3-10: Household Growth Projections
(Source: ZBPF)

	Average Household Size (ACS 2013) ⁶	2015-2020	2020-2030	2030-2040
Tooele Valley		2,693	6,495	8,605
Grantsville	3.20	499	1,382	1,851
Lake Point	3.20	42	73	77
Ophir	3.20	0	1	2
Rush Valley	2.57	2	8	10
Stansbury Park	3.54	42	41	70
Stockton	2.87	29	68	79
Tooele City	3.11	1,438	3,221	4,286
Unincorporated Tooele Valley	3.20	641	1,702	2,231
Remaining County		200	511	1,054
Vernon	3.03	2	5	17
Wendover	2.76	74	167	209
Remaining Tooele County	3.20	125	339	828

⁶ The County average (3.2) was used for areas for which an area was not available, including Lake Point and unincorporated areas.

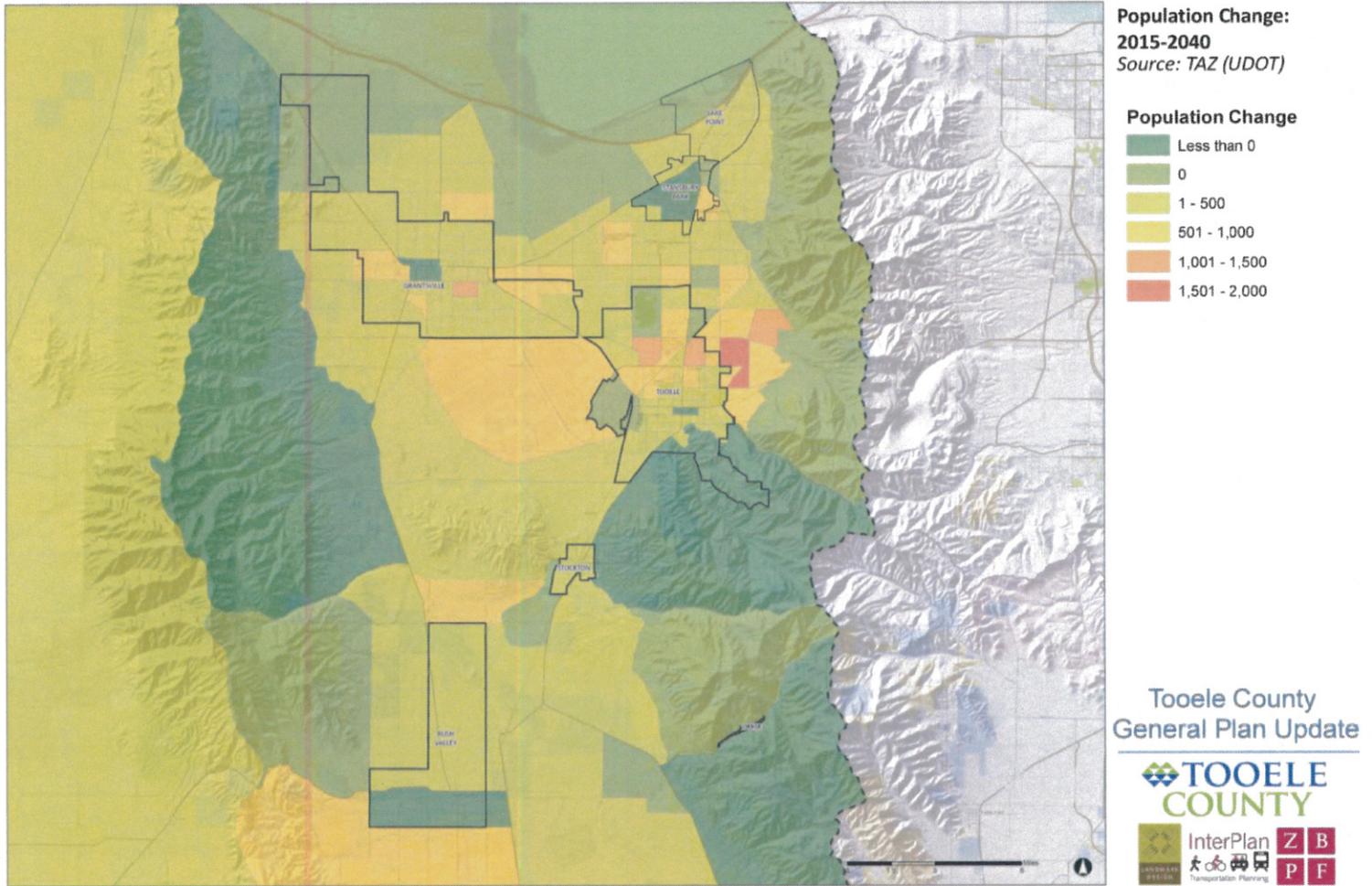
	Average Household Size (ACS 2013) ⁶	2015-2020	2020-2030	2030-2040
TOTAL		2,893	7,006	9,658

Growth in Stansbury Park and Lake Point seem to be quite low compared to the significant growth that has occurred in these areas in recent years. This is a result of the boundaries which are used in the analysis, which uses proposed boundaries if these areas were to incorporate. Much of the projected growth near Stansbury Park and Lake Point is outside of these proposed boundaries; therefore, it is not reflected in the projections. Because there are no fixed boundaries for these areas at this time, actual growth could differ based on future boundaries.

Table 3-11: Average Annual Household Growth Projections
(Source: ACS 5-year Estimate; ZBPF; UDOT)

	2015-2020	2020-2030	2030-2040
Tooele Valley	539	650	860
Grantsville	100	138	185
Lake Point	8	7	8
Ophir	0	0	0
Rush Valley	0	1	1
Stansbury Park	8	4	7
Stockton	6	7	8
Tooele City	288	322	429
Unincorporated Tooele Valley	128	170	223
Remaining County	40	51	105
Vernon	0	1	2
Wendover	15	17	21
Remaining Tooele County	25	34	83
TOTAL	579	701	966

Map 3-2
Projected Population Change 2015-2040
(Source: UDOT; ZBPF)



HOUSING PERMITS

Table 3-12 shows the number of residential building permits issued per year between 2005 and 2014. Construction decreased significantly during the recession of 2009 and 2010, and although building permits have not returned to pre-recession levels, the number per year has increased during the past three years. Population projections indicate that the number of permits will continue to rise.

Table 3-12: Average Residential Building Permits
(Source: BEBR)

	2005-2014	2005-2009	2009-2014	2012-2014
Grantsville	90	113	66	60
Stockton	0	0	0	0
Tooele City	122	153	91	102
Wendover	1	1	1	1
Other Tooele County	170	213	126	144
Total	382	480	285	307

LIFECYCLE HOUSING

It is important to ensure housing suitable for different stages of life, such as units for singles and young couples, townhomes for retirees, as well as opportunities for senior citizen housing and long-term care/assisted living facilities. Such an approach creates opportunities for people to live and grow in the same community. It also enables young couples, families, and the elderly to live near relatives

Tooele County has a range of housing options for different demographics. Tooele County has eight assisted living facilities for a total of 376 units. There are approximately 1,821 multi-family units in Tooele County, which help to provide housing options for entry-level households. Furthermore, the general affordability of homes in

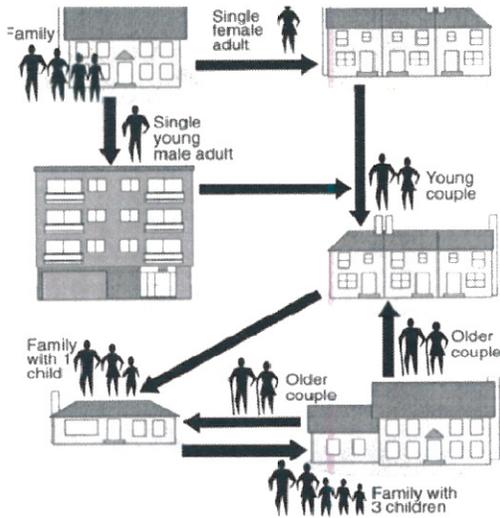
Tooele County, which will be discussed in greater detail in the Affordability Analysis, suggests that there are ample housing alternatives for households of various sizes, ages, and incomes; however, there is a lack of affordable housing opportunities for households in Tooele County below 30 percent AMI. Future housing development should seek to increase the number of affordable units to households with very low income.

2013 ACS data shows that 2,776 of 18,281 householders, or 15 percent, are at least 65 years old, and 36 percent are between 45 and 64, indicating that the number of householders over 65 will continue to increase through 2040. Townhomes in the community can help independent retirees live in the City without the maintenance needs of a detached house.

Table 3-13: Assisted Living Facilities in Tooele County

Name	Location	Number of Units
Diamond Jane's Assisted Living	Grantsville	16
Cottage Glen	Tooele	56
Magnolia House Assisted Living	Tooele	16
Canyon Cove	Tooele	21
Remington Park	Tooele	72
Somerset Gardens	Tooele	28
Willow Creek	Grantsville	83
Rocky Mountain Care	Tooele	84
Total		376

Figure 3-1: Life-Cycle Housing



2013 ACS data shows that 817 of 18,281 householders are under the age of 25 – only about 4 percent of all households. Residential developments with greater density can cater to this demographic. Millennials see socially-conscious shopping and living as highly desirable. This generation is also highly social and often seeks semi-urban, mixed-use development. Since this demographic is generally value-conscious, developments that match modern aesthetics, but at a discount compared to more urban areas, will be a draw.

**Table 3-14: Householders by Age Group
(Source: ACS 2013)**

	Under 25	25 to 44	45 to 64	65+	Total
Tooele Valley	621	6,622	5,274	2,349	14,866
Grantsville	106	1,125	1,137	493	2,861
Ophir	-	3	1	1	5
Rush Valley	-	29	116	63	208
Stansbury Park	37	737	416	197	1,387
Stockton	-	83	112	52	247
Tooele City	478	4,645	3,492	1,543	10,158
Remaining County	52	188	205	56	501
Vernon	9	26	25	17	77
Wendover	43	162	180	39	424
Unincorporated County	144	1,217	1,182	371	2,914
Tooele County	817	8,027	6,661	2,776	18,281

**Table 3-15: Percent of Householders by Age Group
(Source: ACS 2013)**

	Under 25	25 to 44	45 to 64	65+	Total
Tooele Valley	4%	45%	35%	16%	100%
Grantsville	4%	39%	40%	17%	100%
Ophir	0%	60%	20%	20%	100%
Rush Valley	0%	14%	56%	30%	100%
Stansbury Park	3%	53%	30%	14%	100%
Stockton	0%	34%	45%	21%	100%
Tooele City	5%	46%	34%	15%	100%
Remaining County	10%	38%	41%	11%	100%
Vernon	12%	34%	32%	22%	100%

	Under 25	25 to 44	45 to 64	65+	Total
Wendover	10%	38%	42%	9%	100%
Unincorporated County	5%	42%	41%	13%	100%
Tooele County	4%	44%	36%	15%	100%

TOOELE COUNTY HOUSING AFFORDABILITY

Utah State Code (Section 17-27a-401) requires municipalities to include a plan for moderate-income housing as part of a general plan. It outlines a responsibility of a municipality to facilitate a “reasonable opportunity” for those households with moderate income to live within the municipality.

Moderate-income housing is defined by HUD as “housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80 percent of the median gross income for households of the same size in the county in which the City is located.” This study uses Area Median Income (AMI) in Tooele County as determined by the U.S. Department of Housing and Urban Development (HUD) and average household size by the American Community Survey (ACS) to determine moderate income thresholds for an average household.

AREA MEDIAN INCOMES

In order to determine the availability of affordable housing, or the opportunity for low- to moderate-income households to live in the County, this section defines what is affordable for the targeted income groups at 80 percent, 50 percent, and 30 percent of the Area Median Income. The FY2015 HUD AMI⁷ for a household of 3 persons

⁷ The HUD AMI figure is released annually. It is based on a median family income and used as a standard figure across all HUD programs. Although it is a

in Tooele County is \$64,833. Given this AMI, the targeted income group cut-offs are shown in the Table 3-16 below.

Table 3-16: Income Thresholds for Targeted Income Groups

	30% of AMI	50% of AMI	80% of AMI
Household Income	\$19,450	\$32,417	\$51,867

HUD considers an affordable monthly housing payment for either a mortgage or rent to be no greater than 30 percent of gross monthly income. This 30 percent should include utilities and other housing costs such as mortgage and hazard insurance. Table 3-17 below shows affordable monthly allowances for each of the targeted income group levels. These amounts represent total housing costs affordable at 30 percent of gross income. Utah Code does not stipulate whether those of moderate income must be able to purchase a home, so the allowance considers affordability for either a mortgage or rental rate. A family choosing housing would need to factor utilities and other fees for a given housing unit within this affordable range. For example, a household at the 80 percent AMI threshold has a monthly housing allowance of \$1,297. If utilities are \$250, the family can afford a rent or mortgage payment of \$1,047 per month.

Table 3-17: Affordable Monthly Housing Allowances for Targeted Income Groups

family income, it is the standard figure used by HUD and other housing programs, as well as affordability studies and consolidated plans, even when compared against households. This is to maintain comparability across programs and studies. This study uses the HUD AMI for this comparability and industry standard. If household income were to be used instead of family income to compare to affordable housing units, the County would find less affordable units within the County.

Family Income Level	30% of AMI	50% of AMI	80% of AMI
Monthly Housing Allowance (Including Utilities)	\$486	\$810	\$1,297
Monthly Housing Payment Allowance (not including \$250 in Utilities)	\$236	\$560	\$1,047

Table 3-18 shows the home price ranges affordable for targeted income groups to purchase at various interest rates. Note the significant difference the interest rate makes on affordability. This assumes utility payments at \$250 per month,⁸ average Tooele County property tax rates, mortgage and hazard insurance, interest at the given rates, 30-year mortgage term and a ten percent down payment. While current rates are between four and five percent, making housing much more affordable now, affordability in the County will be more difficult to maintain if interest rates rise.

Table 3-18: Affordable Home Price Ranges by Targeted Income Group and Interest Rate

Household Income Range	Household Income Range	Home Price Range					
		4 Percent Mortgage		5 Percent Mortgage		6 Percent Mortgage	
		Low	High	Low	High	Low	High
< 30% of AMI	< \$19,450	\$0	\$45,956	\$0	\$41,738	\$0	\$38,025
30% to 50% of AMI	\$19,450 - \$32,417	\$45,956	\$109,016	\$41,738	\$99,009	\$38,025	\$90,203
50% to 80% of AMI	\$32,417 - \$51,867	\$109,016	\$203,604	\$99,009	\$184,914	\$90,203	\$168,467

PRICING & AFFORDABILITY

⁸ Utilities are assumed to be higher for a larger average home size.

As in the housing stock analysis, affordability is broken into two housing categories: Single-Family Residential (SFR) includes single-family attached and detached, condos, PUD, and mobile homes, and Multi-Family Residential (MFR) includes apartments, duplexes, and other multi-unit structures. For the affordability analysis, we assume that SFR are owner occupied and MFR are renter occupied. Affordability for SFR is based on the market value as given by the County Assessor's Office. The affordability of MFR is based on the estimated gross rent, as listed by the US Census Bureau.

Single-Family Residential

Table 3-19 below shows the distribution of SFR by home value, as maintained by the Tooele County Assessor's Office. Nearly 64 percent of all SFR units are valued at less than \$189,999 or below the \$184,914 threshold for affordable households at 80 percent of AMI.⁹ As a comparison, the Census reports the median home value of occupied housing units at \$177,500, which is also below the 80 percent AMI threshold.¹⁰

Table 3-19: Number of Single-Family Units by Home Value

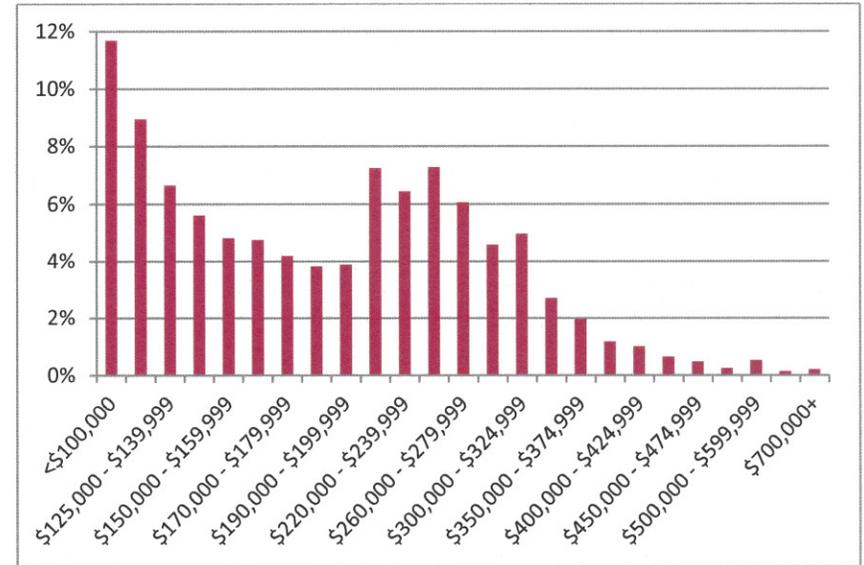
Home Value Range	# of Units	% Total	Cumulative % of Total
<\$100,000	2,741	16%	16%
\$100,000 - \$124,999	2,666	15%	31%
\$125,000 - \$139,999	1,662	10%	41%
\$140,000 - \$149,999	1,083	6%	47%
\$150,000 - \$159,999	1,030	6%	53%
\$160,000 - \$169,999	974	6%	58%
\$170,000 - \$179,999	834	5%	63%
\$180,000 - \$189,999	745	4%	67%

⁹ Based on a 5 percent mortgage

¹⁰ ACS 5-year Estimate (2013)

Home Value Range	# of Units	% Total	Cumulative % of Total
\$190,000 - \$199,999	654	4%	71%
\$200,000 - \$219,999	1,126	6%	77%
\$220,000 - \$239,999	861	5%	82%
\$240,000 - \$259,999	712	4%	87%
\$260,000 - \$279,999	577	3%	90%
\$280,000 - \$299,999	436	3%	92%
\$300,000 - \$324,999	387	2%	95%
\$325,000 - \$349,999	257	1%	96%
\$350,000 - \$374,999	192	1%	97%
\$375,000 - \$399,999	135	1%	98%
\$400,000 - \$424,999	91	1%	98%
\$425,000 - \$449,999	66	0%	99%
\$450,000 - \$474,999	47	0%	99%
\$475,000 - \$499,999	28	0%	99%
\$500,000 - \$599,999	80	0%	100%
\$600,000 - \$699,999	33	0%	100%
\$700,000+	23	0%	100%
Total	17,440		

Figure 3-2: Tooele County Distribution of Single Family Home Values



Multi-Family Residential

The ACS estimates the median gross rent in Tooele County to be \$821, which is slightly above the monthly housing allowance for households at 50 percent AMI. Table 3-20 shows the percent of renter-occupied units by gross rent according to the ACS. The percent is then multiplied by the total number of MFR units as listed by the County Assessor’s Office to estimate the number of units by gross rent. Assuming the same distribution of units by gross rent as determined by the ACS, more than 81 percent of MFR units are below the monthly housing allowance of \$1,297 for households below 80 percent AMI.

Table 3-20: Percent of Units by Gross Rent
(Source: ACS 5-year Estimate; ZBPF)

Minimum	Maximum	Percent (ACS)	Cumulative Percent (ACS)	Estimated Number of Units (Tooele County Assessor's Office)
\$0	\$99	0.9%	0.9%	17
\$100	\$149	0.3%	1.2%	5
\$150	\$199	3.0%	4.2%	55
\$200	\$249	1.2%	5.4%	21
\$250	\$299	1.0%	6.4%	18
\$300	\$349	1.3%	7.7%	24
\$350	\$399	1.0%	8.7%	18
\$400	\$449	2.8%	11.5%	51
\$450	\$499	3.6%	15.1%	66
\$500	\$549	5.3%	20.4%	96
\$550	\$599	4.2%	24.7%	77
\$600	\$649	4.9%	29.6%	90
\$650	\$699	7.7%	37.3%	141
\$700	\$749	6.6%	43.9%	120
\$750	\$799	4.5%	48.4%	81
\$800	\$899	7.9%	56.3%	143
\$900	\$999	7.4%	63.7%	135
\$1,000	\$1,249	16.8%	80.5%	307
\$1,250	\$1,499	13.5%	94.1%	246
\$1,500	\$1,999	4.8%	98.8%	87
\$2,000		1.2%	100.0%	21
Total				1,821

Total Affordability

Table 3-21 aggregates SFR and MFR units for a cumulative affordability rate. Assuming a 5 percent mortgage, 72 percent of all residential units in Tooele County are affordable to households below 80 percent AMI.

Table 3-21: Total Number of Affordable Units by Targeted Income Group at a 5% Mortgage

Household Income Level	Income Range	Affordable SFR, Condo, PUD, Duplex Units	Affordable Multi-Family Units	Total Affordable Units	% of All Units	Cumulative % of All Units
< 30% of AMI	< \$19,450	845	276	1,121	5.82%	5.82%
30% to 50% of AMI	\$19,450 - \$32,417	2,658	605	3,263	16.94%	22.76%
50% to 80% of AMI	\$32,417 - \$51,867	8,955	585	9,540	49.53%	72.29%
Total		12,458	1,466	13,924	72.29%	

Despite an overall affordability rate of 72 percent, there is a lack of affordable housing opportunities for households below 30 percent AMI in Tooele County, when compared to the number of households within the income range. As shown in Table 3-22, nearly 11 percent of all households in Tooele County are at or below 30 percent AMI, while only 6 percent of all units are affordable to households at this income level. Furthermore, due to a combination of high demand for low-income rental units and a low supply of these units, with only 276 units below 30 percent AMI and an additional 605 units below 50 percent AMI, many residents in Tooele County are unable to take advantage of certain housing programs, including the Section 8 Housing Choice Voucher Program. Future housing development in Tooele County should seek to increase the number of affordable units, including rental units for households with income below 30 percent AMI.

Mortgage rates can significantly affect the number of affordable homes. For example, when calculating home costs, if a 6 percent mortgage rate is used instead of a 5 percent mortgage then the overall percent of affordable units decreases from 72 percent to 66

percent. Conversely, a 4 percent mortgage increases total affordability to 78 percent.

Table 3-22: Comparison of Affordable Units and Household Income

Household Income Level	Income Range	Total Affordable Units	% of Units	Number of Households in Income Range	% of Households
< 30% of AMI	< \$19,450	1,121	5.82%	1,996	10.92%
30% to 50% of AMI	\$19,450 - \$32,417	3,263	16.94%	1,681	9.19%
50% to 80% of AMI	\$32,417 - \$51,867	9,540	49.53%	3,129	17.12%
Total		13,924	72.29%	6,805	37.22%

Table 3-23: Percent of Units by Mortgage Rate

	4% Mortgage	% of Total	5% Mortgage	% of Total	6% Mortgage	% of Total
Affordable SFR	13,620	78%	12,458	71%	11,217	64%
Affordable MFR	1,466	81%	1,466	81%	1,466	81%
Total Affordable Units	15,086	78%	13,924	72%	12,683	66%

As a comparison, Table 3-23 shows the total affordability for Tooele and Grantsville as they compare to Tooele County. Further analysis of the affordability of Tooele and Grantsville are in the following sections.

Table 3-24: Housing Affordability Comparison – Tooele County, Tooele City and Grantsville

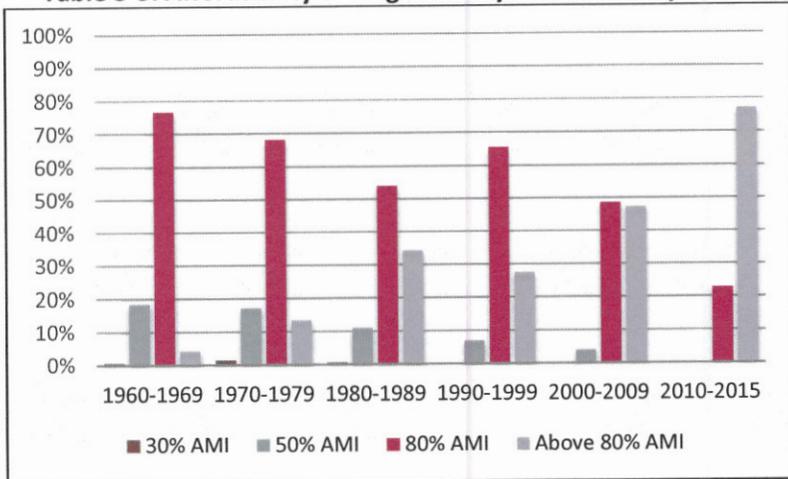
Household Income Level	Income Range	Tooele County Affordability (5% Mortgage)	Tooele City Affordability (5% Mortgage)	Grantsville Affordability (5% Mortgage)
< 30% of AMI	< \$19,450	5.82%	5.06%	8.50%
30% to 50% of AMI	\$19,450 - \$32,417	22.76%	21.65%	15.20%
50% to 80% of AMI	\$32,417 - \$51,867	72.29%	85.35%	50.77%

The affordability of single-family homes in Tooele County differs significantly based on the year the home was built. Table 3-25 and Figure 3-3 show the percent of affordable homes by the year built. Most homes built before 2000 are affordable to households below 80 percent AMI; however, after 2000 the number of homes affordable to households below 80 percent AMI decreases significantly, with only 23 percent of homes affordable to households below 80 percent AMI after 2010.

Table 3-25: Affordable SFR Units by Year Built (Source: Tooele County Assessor’s Office; ZBPF)

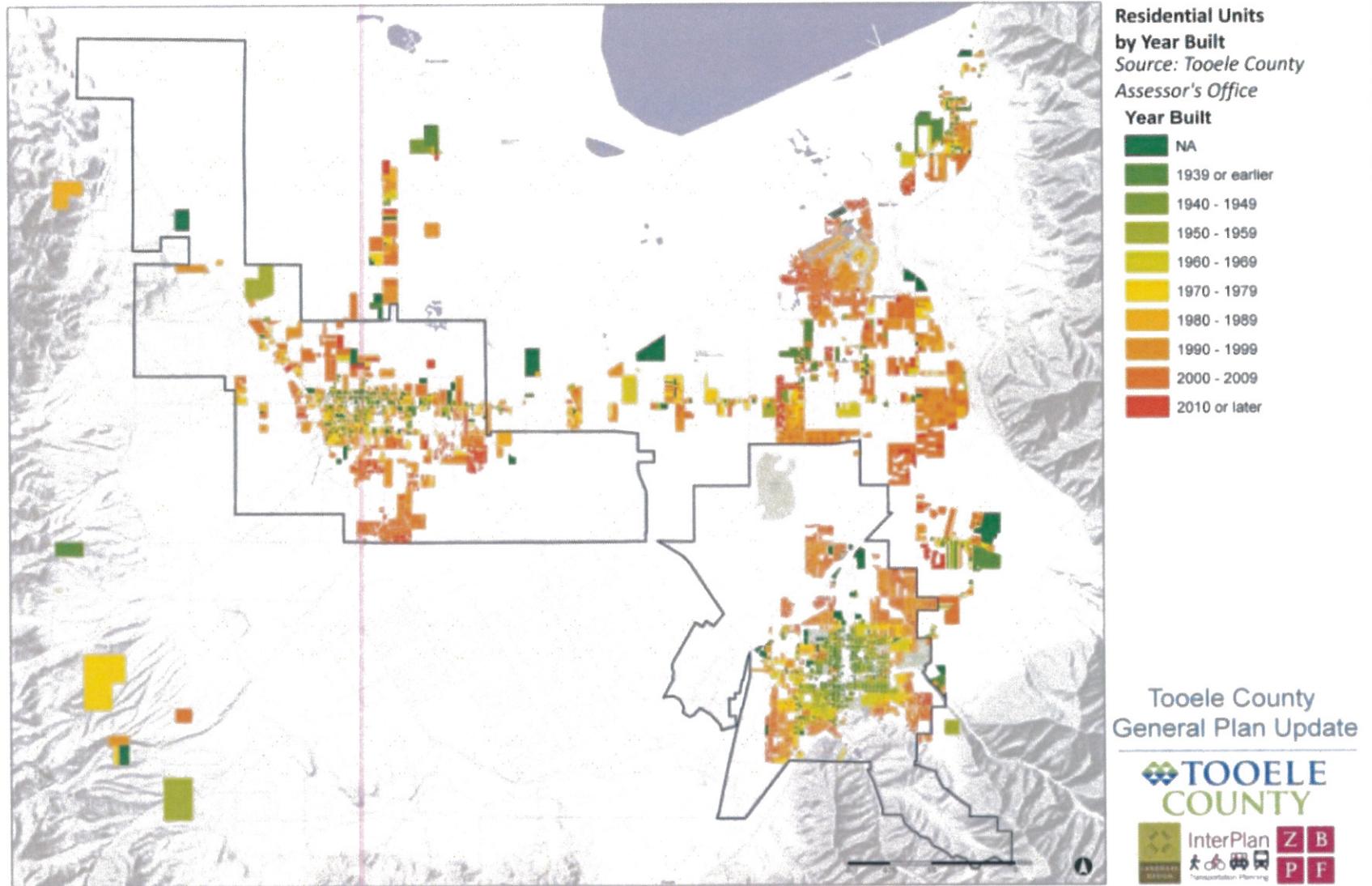
Row Labels	30% AMI	50% AMI	80% AMI	Above 80% AMI	Grand Total
No Year	68%	20%	9%	3%	100%
Pre 1900	4%	43%	46%	8%	100%
1900-1949	2%	55%	40%	3%	100%
1950-1959	1%	48%	49%	3%	100%
1960-1969	1%	19%	77%	4%	100%
1970-1979	1%	17%	68%	13%	100%
1980-1989	1%	11%	54%	34%	100%
1990-1999	0%	7%	65%	28%	100%
2000-2009	0%	4%	48%	47%	100%
2010-2015	0%	0%	23%	77%	100%
Overall	5%	15%	51%	29%	100%

Table 3-3: Affordability of Single-Family Residential by Year Built

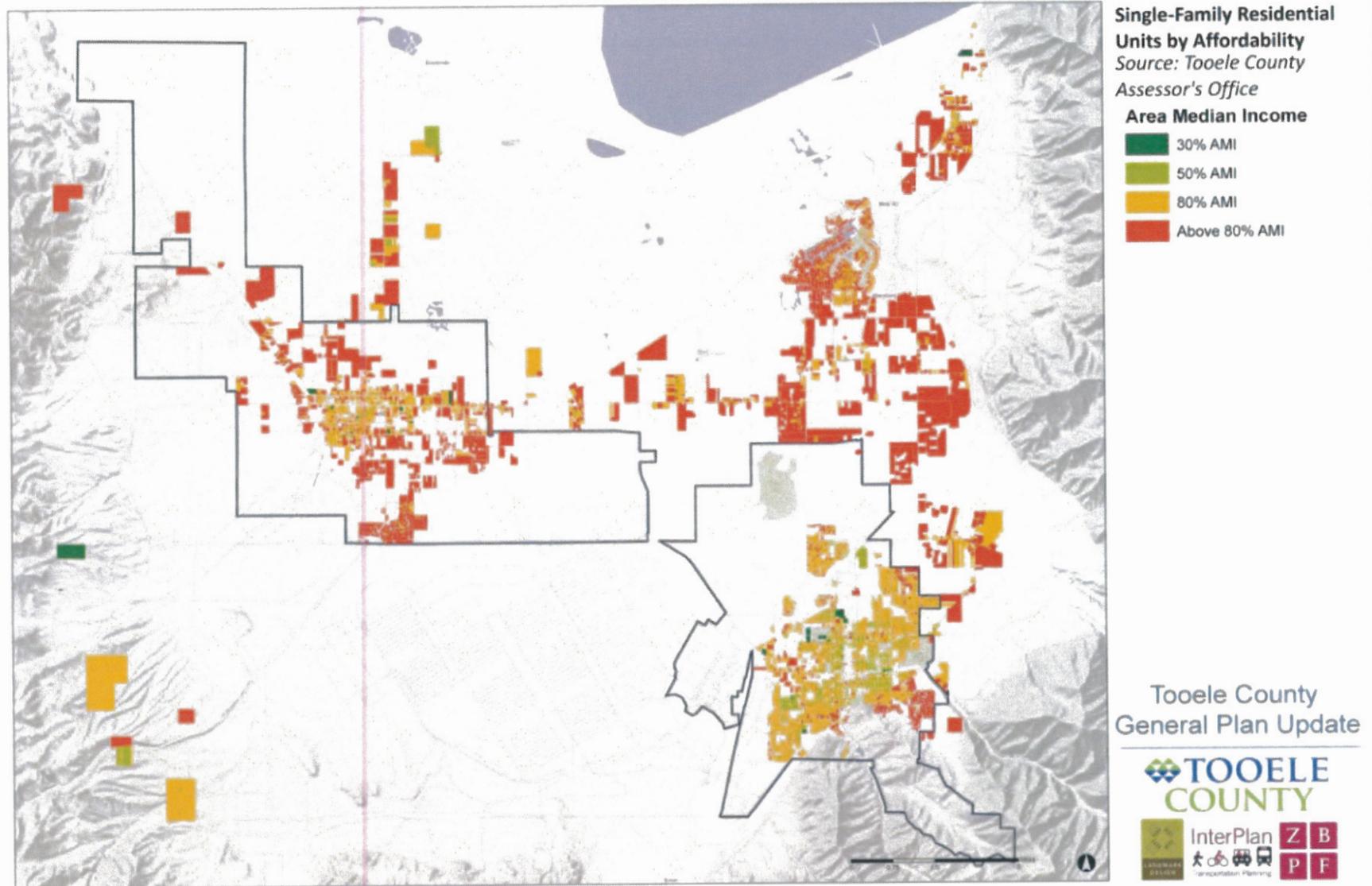


Maps 3 and 4 provide a visual comparison between the location of homes based on year built and affordability. Comparing the location of affordable units to the location of units by year built shows that homes that are above the 80 percent AMI threshold are typically found in the same location as homes that were built after 2015, most notably in the Stansbury Park and Lake Point areas, as well as outside the city centers of Grantsville and Tooele. Although the vast majority of homes in the County are affordable to moderate-income households, it is important that a portion of new homes constructed in the future also be affordable to low-income households

Map 3-3: Residential Units by Year Built



Map 3-4: Single-Family Residential Units by Affordability



TOOELE CITY HOUSING AFFORDABILITY

Utah State Code (Section 10-9a-403) requires cities to include a plan for moderate-income housing as part of a general plan. It outlines a responsibility of a municipality to facilitate a “reasonable opportunity” for those households with moderate income to live within the municipality.

Moderate-income housing is defined by HUD as “housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80 percent of the median gross income for households of the same size in the county in which the city is located.” This study uses Area Median Income (AMI) in Tooele County as determined by the U.S. Department of Housing and Urban Development (HUD) and average household size by the American Community Survey (ACS) to determine moderate income thresholds for an average household.

AREA MEDIAN INCOMES

In order to determine the availability of affordable housing, or the opportunity for low- to moderate-income households to live in the County, this section defines what is affordable for the targeted income groups at 80 percent, 50 percent, and 30 percent of the Area Median Income. The FY2015 HUD AMI¹¹ for a household of 3

¹¹ The HUD AMI figure is released annually. It is based on a median family income and used as a standard figure across all HUD programs. Although it is a family income, it is the standard figure used by HUD and other housing programs, as well as affordability studies and consolidated plans, even when compared against households. This is to maintain comparability across programs and studies. This study uses the HUD AMI for this comparability and industry standard. If household income were to be used instead of family

persons is \$64,833. Given this AMI, the targeted income group cut-offs are shown in the Table 3-26 below.

Table 3-26: Income Thresholds for Targeted Income Groups

	30% of AMI	50% of AMI	80% of AMI
Household Income	\$19,450	\$32,417	\$51,867

HUD considers an affordable monthly housing payment for either a mortgage or rent to be no greater than 30 percent of gross monthly income. This 30 percent should include utilities and other housing costs such as mortgage and hazard insurance. Table 3-27 below shows affordable monthly allowances for each of the targeted income group levels. These amounts represent total housing costs affordable at 30 percent of gross income. Utah Code does not stipulate whether those of moderate income must be able to purchase a home, so the allowance considers affordability for either a mortgage or rental rate. A family choosing housing would need to factor utilities and other fees for a given housing unit within this affordable range. For example, a household at the 80 percent AMI threshold has a monthly housing allowance of \$1,297. If utilities are \$250, the family can afford a rent or mortgage payment of \$1,047 per month.

Table 3-27: Affordable Monthly Housing Allowances for Targeted Income Groups

Family Income Level	30% of AMI	50% of AMI	80% of AMI
Monthly Housing Allowance (Including Utilities)	\$486	\$810	\$1,297

income to compare to affordable housing units, the City would find less affordable units within the City.

Family Income Level	30% of AMI	50% of AMI	80% of AMI
Monthly Housing Payment Allowance (not including \$250 in Utilities)	\$236	\$560	\$1,047

Table 3-28 shows the home price ranges affordable for targeted income groups to purchase at various interest rates. Note the significant difference the interest rate makes on affordability. This assumes utility payments at \$250 per month,¹² average Tooele City property tax rates, mortgage and hazard insurance, interest at the rates shown in the table below, 30-year mortgage term and a ten percent down payment. While current rates are between four and five percent, making housing much more affordable now, affordability in the City will be more difficult to maintain if interest rates rise.

Table 3-28: Affordable Home Price Ranges by Targeted Income Group and Interest Rate

Household Income Range	Household Income Range	Home Price Range					
		4 Percent Mortgage		5 Percent Mortgage		6 Percent Mortgage	
		Low	High	Low	High	Low	High
< 30% of AMI	< \$19,450	\$0	\$45,984	\$0	\$41,760	\$0	\$38,043
30% to 50% of AMI	\$19,450 - \$32,417	\$45,984	\$109,083	\$41,760	\$99,062	\$38,043	\$90,245
50% to 80% of AMI	\$32,417 - \$51,867	\$109,083	\$203,728	\$99,062	\$185,013	\$90,245	\$168,546

PRICING & AFFORDABILITY

¹² Utilities are assumed to be higher for a larger average home size.

Single-Family Residential

Table 3-29 below shows the distribution of SFR by home value, as maintained by the Tooele County Assessor's Office. Nearly 88 percent of all SFR units are valued at less than \$179,999 or below the \$185,013 threshold for affordable households at 80 percent of AMI.¹³ As a comparison, the median home value of occupied housing units is \$163,100, which is below the 80 percent AMI threshold.¹⁴

Table 3-29: Number of Single-Family Units by Home Value

Home Value Range	# of Units	% Total	Cumulative % of Total
<\$100,000	1,845	20%	20%
\$100,000 - \$124,999	2,211	23%	43%
\$125,000 - \$139,999	1,283	14%	57%
\$140,000 - \$149,999	785	8%	65%
\$150,000 - \$159,999	689	7%	72%
\$160,000 - \$169,999	605	6%	79%
\$170,000 - \$179,999	489	5%	84%
\$180,000 - \$189,999	363	4%	88%
\$190,000 - \$199,999	269	3%	90%
\$200,000 - \$219,999	331	4%	94%
\$220,000 - \$239,999	185	2%	96%
\$240,000 - \$259,999	91	1%	97%
\$260,000 - \$279,999	90	1%	98%
\$280,000 - \$299,999	67	1%	98%
\$300,000 - \$324,999	45	0%	99%
\$325,000 - \$349,999	40	0%	99%
\$350,000 - \$374,999	21	0%	100%
\$375,000 - \$399,999	13	0%	100%
\$400,000 - \$424,999	4	0%	100%
\$425,000 - \$449,999	3	0%	100%
\$450,000 - \$474,999	4	0%	100%
\$475,000 - \$499,999	1	0%	100%
\$500,000 - \$599,999	7	0%	100%
\$600,000 - \$699,999	3	0%	100%
\$700,000+	1	0%	100%

¹³ Based on a 5 percent mortgage

¹⁴ ACS 5-year Estimate (2013)

Total Affordability

Table 3-31 aggregates SFR and MFR units for a cumulative affordability rate. Assuming a 5 percent mortgage, 85 percent of all residential units in Tooele City are affordable to households below 80 percent AMI.

Table 3-31: Total Number of Affordable Units by Targeted Income Group at a 5% Mortgage

Household Income Level	Income Range	Affordable		Total Affordable Units	% of All Units	Cumulative % of All Units
		SFR, Condo, PUD, Duplex Units	MFR Units			
< 30% of AMI	< \$19,450	419	120	539	5.06%	5.06%
30% to 50% of AMI	\$19,450 - \$32,417	1,384	392	1,766	15.59%	21.65%
50% to 80% of AMI	\$32,417 - \$51,867	6,300	479	6,779	63.70%	85.35%
Total		8,103	981	9,084	85.35%	

Table 3-32: Percent of Units by Mortgage Rate

	4% Mortgage	% of Total	5% Mortgage	% of Total	6% Mortgage	% of Total
Affordable SFR	8,637	91%	8,103	86%	7,341	78%
Affordable MFR	981	82%	981	82%	981	82%
Total Affordable Units	9,618	90%	9,084	85%	8,322	78%

Mortgage rates can significantly affect the number of affordable homes. For example, when calculating home costs, if a 6 percent mortgage rate is used instead of a 5 percent mortgage then the overall percent of affordable units decreases from 85 percent to 78 percent. Conversely, a 4 percent mortgage increases total affordability to 90 percent.

GRANTSVILLE HOUSING AFFORDABILITY

Utah State Code (Section 10-9a-403) requires municipalities to include a plan for moderate-income housing as part of a general plan. It outlines a responsibility of a municipality to facilitate a “reasonable opportunity” for those households with moderate income to live within the municipality.

Moderate-income housing is defined by HUD as “housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80 percent of the median gross income for households of the same size in the county in which the City is located.” This study uses Area Median Income (AMI) in Tooele County as determined by the U.S. Department of Housing and Urban Development (HUD) and average household size by the American Community Survey (ACS) to determine moderate income thresholds for an average household.

AREA MEDIAN INCOMES

In order to determine the availability of affordable housing, or the opportunity for low- to moderate-income households to live in the County, this section defines what is affordable for the targeted income groups at 80 percent, 50 percent, and 30 percent of the Area Median Income. The FY2015 HUD AMI¹⁶ for a household of 3 persons

¹⁶ The HUD AMI figure is released annually. It is based on a median family income and used as a standard figure across all HUD programs. Although it is a family income, it is the standard figure used by HUD and other housing programs, as well as affordability studies and consolidated plans, even when compared against households. This is to maintain comparability across programs and studies. This study uses the HUD AMI for this comparability and industry standard. If household income were to be used instead of family income to compare to affordable housing units, the City would find less affordable units within the City.

is \$64,833. Given this AMI, the targeted income group cut-offs are shown in the Table 3-33 below.

Table 3-33: Income Thresholds for Targeted Income Groups

	30% of AMI	50% of AMI	80% of AMI
Household Income	\$19,450	\$32,417	\$51,867

HUD considers an affordable monthly housing payment for either a mortgage or rent to be no greater than 30 percent of gross monthly income. This 30 percent should include utilities and other housing costs such as mortgage and hazard insurance. Table 3-34 below shows affordable monthly allowances for each of the targeted income group levels. These amounts represent total housing costs affordable at 30 percent of gross income. Utah Code does not stipulate whether those of moderate income must be able to purchase a home, so the allowance considers affordability for either a mortgage or rental rate. A family choosing housing would need to factor utilities and other fees for a given housing unit within this affordable range. For example, a household at the 80 percent AMI threshold has a monthly housing allowance of \$1,297. If utilities are \$250, the family can afford a rent or mortgage payment of \$1,047 per month.

Table 3-34: Affordable Monthly Housing Allowances for Targeted Income Groups

Family Income Level	30% of AMI	50% of AMI	80% of AMI
Monthly Housing Allowance (Including Utilities)	\$486	\$810	\$1,297
Monthly Housing Payment Allowance (not including \$250 in Utilities)	\$236	\$560	\$1,047

Table 3-35 shows the home price ranges affordable for targeted income groups to purchase at various interest rates. Note the significant difference the interest rate makes on affordability. This assumes utility payments at \$250 per month,¹⁷ average Grantsville property tax rates, mortgage and hazard insurance, interest at the given rates, 30-year mortgage term and a ten percent down payment. While current rates are between four and five percent, making housing much more affordable now, affordability in the City will be more difficult to maintain if interest rates rise.

Table 3-35: Affordable Home Price Ranges by Targeted Group and Interest Rate

Household Income Range	Household Income Range	Home Price Range					
		4 Percent Mortgage		5 Percent Mortgage		6 Percent Mortgage	
		Low	High	Low	High	Low	High
< 30% of AMI	< \$19,450	\$0	\$45,406	\$0	\$41,301	\$0	\$37,674
30% to 50% of AMI	\$19,450 - \$32,417	\$45,406	\$107,711	\$41,301	\$97,973	\$38,043	\$89,369
50% to 80% of AMI	\$32,417 - \$51,867	\$107,711	\$201,166	\$97,973	\$182,979	\$90,245	\$166,910

PRICING & AFFORDABILITY - GRANTSVILLE

Single-Family Residential

Table 3-36 below shows the distribution of SFR by home value, as maintained by the Tooele County Assessor’s Office. Nearly 47 percent of all SFR units are valued at less than \$179,999 or below the \$182,979 threshold for affordability households at 80 percent of

¹⁷ Utilities are assumed to be higher for a larger average home size.

AMI.¹⁸ As a comparison, the median home value of occupied housing units is \$183,700, which is near the 80 percent AMI threshold.¹⁹

Table 3-36: Number of Single-Family Units by Home Value

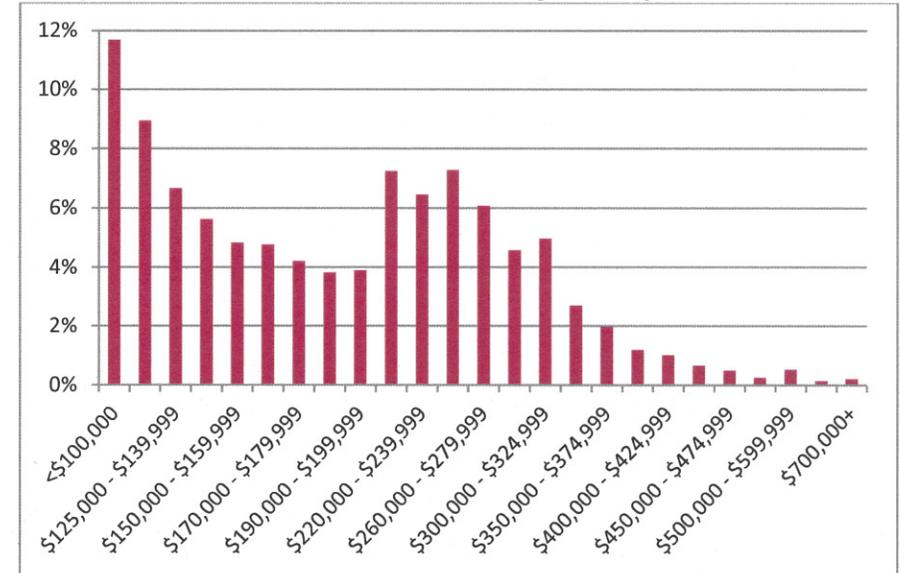
Home Value Range	# of Units	% Total	Cumulative % of Total
<\$100,000	337	12%	12%
\$100,000 - \$124,999	258	9%	21%
\$125,000 - \$139,999	192	7%	27%
\$140,000 - \$149,999	162	6%	33%
\$150,000 - \$159,999	139	5%	38%
\$160,000 - \$169,999	137	5%	42%
\$170,000 - \$179,999	121	4%	47%
\$180,000 - \$189,999	110	4%	50%
\$190,000 - \$199,999	112	4%	54%
\$200,000 - \$219,999	209	7%	62%
\$220,000 - \$239,999	186	6%	68%
\$240,000 - \$259,999	210	7%	75%
\$260,000 - \$279,999	175	6%	81%
\$280,000 - \$299,999	132	5%	86%
\$300,000 - \$324,999	143	5%	91%
\$325,000 - \$349,999	78	3%	94%
\$350,000 - \$374,999	57	2%	96%
\$375,000 - \$399,999	34	1%	97%
\$400,000 - \$424,999	29	1%	98%
\$425,000 - \$449,999	19	1%	98%
\$450,000 - \$474,999	14	0%	99%
\$475,000 - \$499,999	7	0%	99%
\$500,000 - \$599,999	15	1%	100%
\$600,000 - \$699,999	4	0%	100%
\$700,000+	6	0%	100%

¹⁸ Based on a 5 percent mortgage

¹⁹ ACS 5-year Estimate (2013)

Home Value Range	# of Units	% Total	Cumulative % of Total
Total	2,886		

Figure 3-5: Grantsville Distribution of Single-Family Home Values



Multi-Family Residential

The ACS estimates the median gross rent in Grantsville to be \$700, which is between the monthly housing allowance for households between 30 and 50 percent AMI. Table 3-37 shows the percent of renter-occupied units by gross rent according to the ACS. The percent is then multiplied by the total number of MFR units as listed by the County Assessor’s Office to estimate the number of units by gross rent. Assuming the same distribution of units by gross rent as determined by the ACS, more than 88 percent of MFR units are

below the monthly housing allowance of \$1,297 for households below 80 percent AMI.

Table 3-37: Percent of Units by Gross Rent
(Source: ACS 5-year Estimate; ZBPF)

Minimum	Maximum	Percent (ACS)	Cumulative Percent (ACS)	Estimated Number of Units (Tooele County Assessor's Office)
\$0	\$99	8.2%	8.2%	19
\$100	\$149	0.0%	8.2%	-
\$150	\$199	5.9%	14.1%	14
\$200	\$249	6.3%	20.5%	14
\$250	\$299	5.5%	25.9%	13
\$300	\$349	0.0%	25.9%	-
\$350	\$399	0.0%	25.9%	-
\$400	\$449	1.5%	27.4%	3
\$450	\$499	0.0%	27.4%	-
\$500	\$549	7.8%	35.2%	18
\$550	\$599	2.5%	37.8%	6
\$600	\$649	1.5%	39.2%	3
\$650	\$699	10.8%	50.0%	25
\$700	\$749	6.8%	56.8%	15
\$750	\$799	7.2%	63.9%	16
\$800	\$899	5.9%	69.8%	14
\$900	\$999	1.7%	71.5%	4
\$1,000	\$1,249	16.5%	88.0%	38
\$1,250	\$1,499	6.1%	94.1%	14
\$1,500	\$1,999	5.9%	100.0%	14
\$2,000		0.0%	100.0%	-

Minimum	Maximum	Percent (ACS)	Cumulative Percent (ACS)	Estimated Number of Units (Tooele County Assessor's Office)
Total				229

Total Affordability

Table 3-38 aggregates SFR and MFR units for a cumulative affordability rate. Assuming a 5 percent mortgage, 51 percent of all residential units in Grantsville are affordable to households below 80 percent AMI.

Table 3-38: Total Number of Affordable Units by Targeted Income Group at a 5% Mortgage

Household Income Level	Income Range	Number of Affordable SFR, Condo, PUD, Duplex Units	Number of Affordable Multi-Family Units	Total Affordable Units	% of All Units	Cumulative % of All Units
< 30% of AMI	< \$19,450	202	63	265	8.50%	8.50%
30% to 50% of AMI	\$19,450 - \$32,417	125	84	209	6.70%	15.20%
50% to 80% of AMI	\$32,417 - \$51,867	1,053	55	1,108	35.57%	50.77%
Total		1,380	201	1,581	50.77%	

Mortgage rates can significantly affect the number of affordable homes. For example, when calculating home costs, if a 6 percent mortgage rate is used instead of a 5 percent mortgage then the overall percent of affordable units decreases from 51 percent to 44

percent. Conversely, a 4 percent mortgage increases total affordability to 57 percent.

Table 3-39: Percent of Units by Mortgage Rate

	4% Mortgage	% of Total	5% Mortgage	% of Total	6% Mortgage	% of Total
Affordable SFR	1,574	55%	1,380	48%	1,166	40%
Affordable MFR	201	88%	201	88%	201	88%
Total Affordable Units	1,775	57%	1,581	51%	1,367	44%

GUIDING PRINCIPLES

Three guiding principles can help direct residential growth in Tooele County and Tooele Valley in the future. These principles include:

- Preserve and enhance Tooele Valley’s neighborhoods, creating more distinct places in the process
- Provide a range of housing types for all demographics and ages, including entry level, family, and senior housing
- Locate density near cities, communities, services, or gathering places, including schools and city centers

Guiding Principle 1: Preserve and enhance Tooele Valley’s neighborhoods

Preserving the current way of life is extremely important to many residents in Tooele County and its many municipalities. Future housing growth should seek to preserve and enhance existing neighborhoods.

Guiding Principle 2: Provide a range of housing types for all demographics and ages

Although housing in the County is very affordable, recent trends indicate that new construction is less affordable for moderate- and low-income households. Having increased property values is beneficial for the County and its municipalities because higher property values increase the fiscal impacts of property taxes to the municipalities. Future development needs to include a balance between the construction of homes of higher value and providing affordable housing to moderate- and low-income households.

There is significant demand for housing alternatives for low-income households, especially rental units. The development of additional low-income units should be pursued in order to meet the need for these units in Tooele County.

Providing affordable housing in Tooele County will require the coordination Tooele County, the Tooele County Housing Authority, and each community in Tooele County. The 2012 Tooele County Housing Condition Plan outlines the following plan to meeting the demand for affordable housing in Tooele County:

1. Work with Tooele City and Grantsville City to encourage and promote housing for the low and extremely low income populations.
2. Work with officials in the incorporations of Wendover, Stockton, Vernon, and Rush Valley to rehabilitate and preserve housing stock, particularly rental units.
3. Encourage zoning ordinances and developers to provide an inter-mix of lot sizes and mixed use development.
4. Seek to educate and be educated by the public about affordable or moderate-income housing needs, housing

options, being a good neighbor, and the benefits of providing diverse housing choices.

5. Designate additional high density areas on the long range land use map.

In addition to this plan, the following are additional ways that Tooele County and its municipalities can work to provide a range of housing types for all demographics and ages.

Encourage development of affordable housing, focusing at transit sites and significant transportation corridors

Although segregation of affordable housing in a community is generally frowned upon, concentration of affordable housing at TOD sites and along bus routes is highly encouraged by HUD as these sites also reduce cost of living and increase access to employment opportunity for low-income families. Major transportation corridors are busy areas more suited to affordable development than single-family homes, and it has ample access to UTA bus routes. Ways to achieve this include:

- Identify key sites and create CDAs at each site if needed.
- Identify affordable housing development sites along major transportation corridors with access to current bus routes.
- Provide financial assistance and tools to developers to encourage affordable housing at key sites, when appropriate. Partner with multi-family developers to reduce development costs or incentivize builders to provide affordable units.
- Engage community partners in attracting affordable development.
- Assist low-income families to purchase affordable units through a revolving loan fund with down-payment assistance and interest rate buy-downs (or deferred payment loans).

- Waive fees to reduce construction and maintenance costs, allowing lower rental fees to be more feasible.

Encourage energy efficient housing that reduces resident costs

Energy efficiency and green building practices are a win-win for all parties involved. Not only are they an attractive selling point, especially to Millennials, but they also reduce housing costs for low-income households. The following are some means to encourage more energy efficient housing:

- Provide incentives for green building, such as grants or loan assistance, to builders and developers on affordable housing projects.
- Educate homebuilders on federal and state tax credits for energy efficient building.
- Provide zero interest deferred payment loans for down payments to low-income households seeking an efficient home.
- Provide loans to multi-family developments to install green features, such as water saving features or solar panels. These developments can use these features as a marketing tool and use the saved energy costs to pay back the loan.
- Waive fees in return for using green building practices.

Guiding Principle 3: Locate density near cities, communities, services or gathering places

Focusing density at specific areas will not only help to preserve and enhance Tooele Valley's neighborhoods, but may also help to meet the future demand for housing in the Valley and County. Furthermore, density will create a greater variety in lot sizes and unit types which can help to provide housing types for various demographics.

Appendix A:

Public Involvement Results

The following are summary results from the three public meetings held during the planning process.

1 PUBLIC SCOPING MEETING

Held on the evening of July 8, 2015 at the Tooele County Building

TRANSPORTATION & MOBILITY

- Tooele needs a transportation plan for roads and alternative transportation.
- More access points are needed for people to enter and leave the valley, the possibility of a tunnel through the Oquirrh Mountains was brought up.
- Trails coordination between communities and subdivisions, both paved and off-road recreation trails (ATV).
- Hwy 36 suggests an “alternate route” because of the construction but there is not one so how are we to deal with this? 400 West would be a good alternative.
- Will there be UTA and I-80 expansions?
- The county is a blank canvas right now and we need to control the development so it’s not haphazard where transportation should be the guide and not the other way around. We need a unified, integrated approach with trails, roads and development balanced.
- Droubay and Mormon Mountain road are too narrow/no shoulders and busy with recreationalists so they need attention.
- The increase in population is going to cause more and more transportation issues with evacuation, accidents, commuting time etc.
- Highway 36 should not become like Logan Main Street that just goes on forever with too many businesses that slow the flow down and the access is unsafe to these commercial areas.
- There should be an East/ West vision for commercial development to help with the North/South problem.
- The University Avenue in Provo is a good road type option because there is a frontage road that runs along it for slower traffic and commercial access so the main Avenue is faster and more efficient etc. This needs to happen soon so it’s not something that we are trying to fix later where it will be too late to do well.
- Hwy 36 should be preserved as the main artery from Tooele to I-80 where there is not too much commercial use.
- The road system needs to align with the population change. There is a strong need for alternate/parallel roads especially for Hwy 36.
- A road like the Legacy Highway would be good.
- Main arteries and corridors should be distinguished and planned for.
- Transportation needs to accommodate the land use and the first and last mile from home should be considered.
- UTA is well used and needs more times available during the middle of the day to suit others in the community beyond commuters. Transit should be easier to use as well.
- There could be a TRAX stop at Lake Point at least to help with part of the commute.
- The Erda airport should be considered for TRAX and other planning issues.
- The existing light rail could be used.

- The rapid bus transit like in Pittsburg with express stops would be great in Tooele.
- Preparation is the key.

SENSE OF PLACE

- The quality of life should be maintained or improved by preserving what is unique to Tooele Valley.
- Tooele County is known for its wild horses so the creation of horse corridors and a national preservation center (potential for tourism) would be good. “A Horse Power Capital of the West” with wild horses and motorized recreation was brought up.
- The community would like to reserve open spaces, such as the Stockton Sandbar, from mining and other development.
- Tooele County is larger than three states.
- The Tooele valley is known for the homestead/craft agriculture products and there is pride in being able to buy local products.
- The nice small town community feeling needs is valued highly and should be preserved.
- The Tooele area needs distinct places and groupings of land use.

ZONING

- Many land owners of large agriculture lots would like to be able to divide their lots (A-20 and A-40 to R-5 and R-1) to pass on to their children and families. Many claim that the infrastructure already exists i.e. water, sewer, etc.
- Currently, the airport in Erda requires a large buffer where there are large lots and fewer homes. This prevents appropriate zoning for smaller lots.
- Some claim that five acres is too much to maintain which results in a large patch of weeds on unused land.
- There is an issue of compensation that should be addressed when full property value is not obtained.

- There should be an incentive for cluster developments.
- The distance between communities and amenities hurts the valley’s economy.
- The community would like to see impact fees to help parks and transportation – special service districts in use right now
- Many re-zoning attempts have been made in Erda with no success. Large land areas should be able to be subdivided and the county needs to work with us on this. No one can afford to buy larger lots. There is a 600 acre parcel that would make a great daybreak type development and there are two wells for water.
- Zoning components should be balanced and flexible with the amount of acreage.
- There should be lots of choices regarding residential and commercial zoning options.

CHALLENGES & CONSTRAINTS

- There is not enough water to support both residential development and agriculture.
- There can only be development that is based on available water and the aquifer supply.
- There are no new water rights.
- Tooele Valley is not part of the CUP, which limits access to water. This is the main constraint to growth.
- There should be half acre feet per acre (75K acre feet/150K acres).
- There needs to be a study on the capability of the aquifer’s capacity to support septic systems. Currently, it can only support 1500 septic tanks. Are we overburdening the aquifer?
- Salt companies are having problems because the water level is too low, it doesn’t reach the evaporation ponds.

- There is a slim chance of getting water from outside of the Tooele valley.
- The water rights over appropriated by 50%.
- The opportunity to implement better water practices should be explored where water is used more efficiently/effectively and there is a reduction of waste.
- The health department does not approve lots that are less than one acre because of the septic system in Pine Canyon etc.
- Stansbury Park needs better infrastructure.
- Water is a big issue in regards to successfully developing more in the County. There may be wells but if they are dry they will do no good.
- The community does not want the jail to happen here.
- Development should be based on infrastructure so the aquifer is not overloaded and the septic, sewer, and water is sufficient.

PLANNING FOR THE FUTURE

- The county needs to recognize that there can only planning for the incorporated areas.
- Annexation plans should be respected.
- Space should be preserved for potential light rail corridors.
- What attributes would draw desirable employers here? What industry? Good transit, good infrastructure, educated population, access to recreation are some elements.
- What are the county's strengths? Both open space and recreation would be included.
- There is a need to use private roads for recreation access.
- Agriculture land is being developed for residential use. There needs to be a reduction of sprawl by enforcing smaller lots.
- The plan focus should be on preserving agriculture.

- Areas should be determined that are good for agriculture and those that are not where soil studies and amount of water availability is considered.
- Those areas that are not suitable for agriculture could support cluster development.
- Cluster developments should be spread out to be beneficial to all communities.
- Composite materials can help economic development with a combination of education and military.
- More people are interested in renting housing and not using cars so planning should accommodate for those residents.
- The purpose of a master plan is to tell us what we want to be.
- There is an interest in the building tech industry to help reduce the commute outside of the Tooele valley.
- The airport is currently only for private aircraft, is there a potential to expand?
- Transition planning should occur to accommodate the population growth.
- The general plan update must include plans for mixed use development in order to handle the population growth.
- Do we need to look at the housing in incorporated and unincorporated areas separately or as a whole?
- What is happening with the airport area in regards to planning?
- Tooele has good air quality and we don't want it develop to the point where we lose this.
- There are built in opportunities to work with that shouldn't be overlooked because they exist already.
- A strong General Plan will provide fundamental guiding principles and help with whatever change comes in the next ten years. A ten year plan is much better than twenty because there will too much unpredictable change by then.

- Mini shopping centers that are not on Highway 36 would be good, such as along Droubay or in Pine Canyon. There is also a good example that needs to be fixed up in the 300 east Broadway area.
- Companies should satellite here from SLC so people don't have to go over there as much. This would help with being more self-sufficient and would improve the economy.
- The Army Depot is a good business opportunity.
- There needs to be good place making.
- The plan should be all inclusive and sustainable.
- The plan needs to identify where the economic development should go so the infrastructure is in place.
- Light industrial and office use should be enhanced.
- There could be support in the form of water and money if the Jail was relocated here.
- Opportunities need to be pursued in the right areas so there is a proper balance.

TRAILS/OPEN SPACE

- More walking trails would help with the overall transportation plan.
- The beauty of the mountains should be preserved and there should be more parks.
- There should be a balance between open space and population centers.
- Safety is also an element that the community really appreciates and wants to maintain. There should be wider streets and more trails to help support this goal.
- There is a natural break between Erda and Tooele for open space to occur where the landowner has no water rights.
- Stansbury has a big running community.

- Lake Point estates just got approved and they have blocked off the access to the public land which is a problem.
- The community needs to enjoy where they live so there needs to be a balance with ample open space.
- A complete community integrates natural places/open space well.
- There was a trail system recently approved so that should be incorporated into the plan.
- Connectivity is essential in regards to trails and transportation.

2 PUBLIC ALTERNATIVES WORKSHOP

Held on the evening of September 23, 2015 at the Tooele County Building

PRESENTATION

The meeting began with a PowerPoint presentation (available on the project website at www.lidi-ut.com/tooele). The planning team reviewed the key issues and ideas being explored as part of the Land Use and Transportation Plan updates. Specifically, they reviewed the Planning (or Guiding) Principles for that were developed from the input received during the Public Scoping Meeting (held on July 8, 2015) and which were further refined by the Planning Team and the Advisory Committee.

GUIDING PRINCIPLES EXERCISE

In order for the Planning Team to get a better sense of what the Guiding Principles actually “meant” or visually look liked to workshop attendees, eight guiding principles were selected and a collage of images were put together for each Guiding Principle. Attendees were asked to place one red dot and one green dot next to the image they felt least likely and most likely (respectively) resembled the Guiding Principle statement. Attendees were also encouraged to record any thoughts they had to clarify their selection. The results and comments from that exercise are included at the end of this document.

The presentation then provided a summary of the existing conditions information, which the Planning Team has been developing over the last couple of months, and a land use opportunities and constraints analysis that led to the development of several land use and transportation alternatives.

ALTERNATIVES PRESENTATION AND WORKSHOP SESSIONS

Three land use alternatives were then presented to the group. These alternatives built upon three distinct transportation concepts, which were also presented to the group. At the conclusion of the presentation, workshop attendees broke out into two smaller groups to discuss and comment on the alternatives.

General comments received during the meeting and the workshop sessions are below:

Land Use

General Development

- Growth needs to be accepted as part of the Valley’s future.
- Tooele Valley’s entry corridor should be free of industrial uses and strip malls
- Balance land uses/development (high-density housing and commercial) along major highways—like SR-36 and the future Midvalley Highway—in order to keep traffic flowing.
- Look at funneling growth closer to southwest Utah County and making a transportation route around southern point to Utah County.
- Maintaining open space and restricting future development to 5-20 acre lots (e.g. currently undeveloped portions of east Erda) could help maintain

scenic views and a rural feel and limit stress on sparse aquifers/minimize need for expensive public works projects.

- The reuse of Rocky Mountain Arsenal is a great idea.

Water Resources

- Will water be a constraint in 2040? Don't restrict the development based on water. ("Water flows uphill to money.")
- Look for potential water solutions including combining small water providers into a single system; Look at Park City/Snyderville Basin for examples of solutions to water problems.
- Maintaining open space and restricting future development to 5-20 acre lots would limit stress on sparse aquifers.

Employment and Service Opportunities

- The Airport should be viewed as an asset and could be expanded to the north for industrial use; Hwy 138 would be a constraint.
- Balance between open space/agriculture and economic development (technology/light industrial) are essential to making Tooele County a place that its residents can both live and work
- Light manufacturing/technology industries are a good fit for Tooele County; "cutting edge" tech and light industrial companies should be actively recruited

Preservation of Resources

Agriculture

- Agriculture in Tooele Valley is a vital resource to our area and urban development shouldn't be allowed to swallow up or take all the agricultural water resources.

Scenic Views/Rural Feel

Maintain the scenic views and rural feel of the area by:

- Restricting future development to 5-20 acre lots could be a way to this
- Maintaining agricultural uses (green fields and sprinkler irrigation systems)

Unique Features

Preserve unique features within the Valley including the:

- Lake Bonneville water mark along Oquirrh Mountains
- Stockton Sandbar - a geologic antiquity
- Open areas around the Great Salt Lake
- East bench/panorama - East bench should be developed with an emphasis on open space and recreation including a hiking network, mountain biking and equestrian trails.
- Scenic views and rural feel of the valley
- Migratory bird nesting habitat (in particular, keep conflicting uses/users out of these areas)

Transportation

General

- Transportation and development should work together (a hybrid of Alternative 2 & 3).

Pinch Point/Bottleneck at I-80/SR-201

- Additional good roads that provide access to I-80 will open up new areas in Tooele Valley for growth.
- Even if Tooele Valley is a great place to stay, “spillover” from Salt Lake will always occur when housing prices go up in the Salt Lake area and the connection of Tooele Valley to I-80 will always be an important one.
- Several ideas were shared regarding alleviating the pinch point/bottleneck at SR-210/I-80 including:
 - Connect SR-36 or another road to SR-201 to alleviate bottleneck at I-80
 - Use old SR-36 alignment to connect to I-80
 - An east bench road (like the one shown in Transportation Alternative 3) that parallels the railroad around the point to 2100 S.
 - Create separate entry points to I-80 and SR-201 (e.g. Make the entrance from SR-36 to I-80 only at the Stansbury Interchange. SR-36 would continue to SR-201 only.)

“Foothill” Road Idea

Mixed responses were shown regarding the idea of road along the east foothills (as shown in Transportation Alternative 3). Responses and suggestions regarding a foothill road included:

- Allows access to open space and provides a quick corridor around the valley.
- Likes the idea of another connection to SR-201 (an secondary north-south road—to Sr-36—to get travelers to SR-201 on the east side)
- Concerned about the location (invasiveness) of the road
- Needs to have minimal impact to the eastern panorama.
- Concerned about cost and feasibility

Alternatives Routes/Connections to SL Valley

Several suggestions were made regarding alternative routes (to avoid the I-80/SR-201 bottleneck) out of the valley including:

- An east-west connection over/through the mountain
- Development of Middle Canyon Road
- Realign existing road to the to reduce commute times to the Wasatch Front

Transit

- Light rail is preferred to buses. Buses work to get people around the County, but take too long and are still impacted by delays on the freeways out of the Valley.

Multi-modal/Recreational Trails

- Walking connections are important to developing mass transit and community.
- Development along the east bench should emphasize open space and recreation. The east bench is a great location for a hiking network, bike trails and equestrian space (similar to Corner Canyon in Salt Lake County).

Other Concerns regarding the Transportation Alternatives

- Droubay Road extension (shown in Transportation Alternatives 2 & 3) is okay if it comes out Soelsbergs intersection, rather than routing it through Lake Point.
- In Alternative 3, instead of using Church Road look at Bates Canyon.
- Midvalley Highway is too far to the west (Route 1 alignment might be more useful/closer to existing development.)

3 DRAFT PLAN OPEN HOUSE

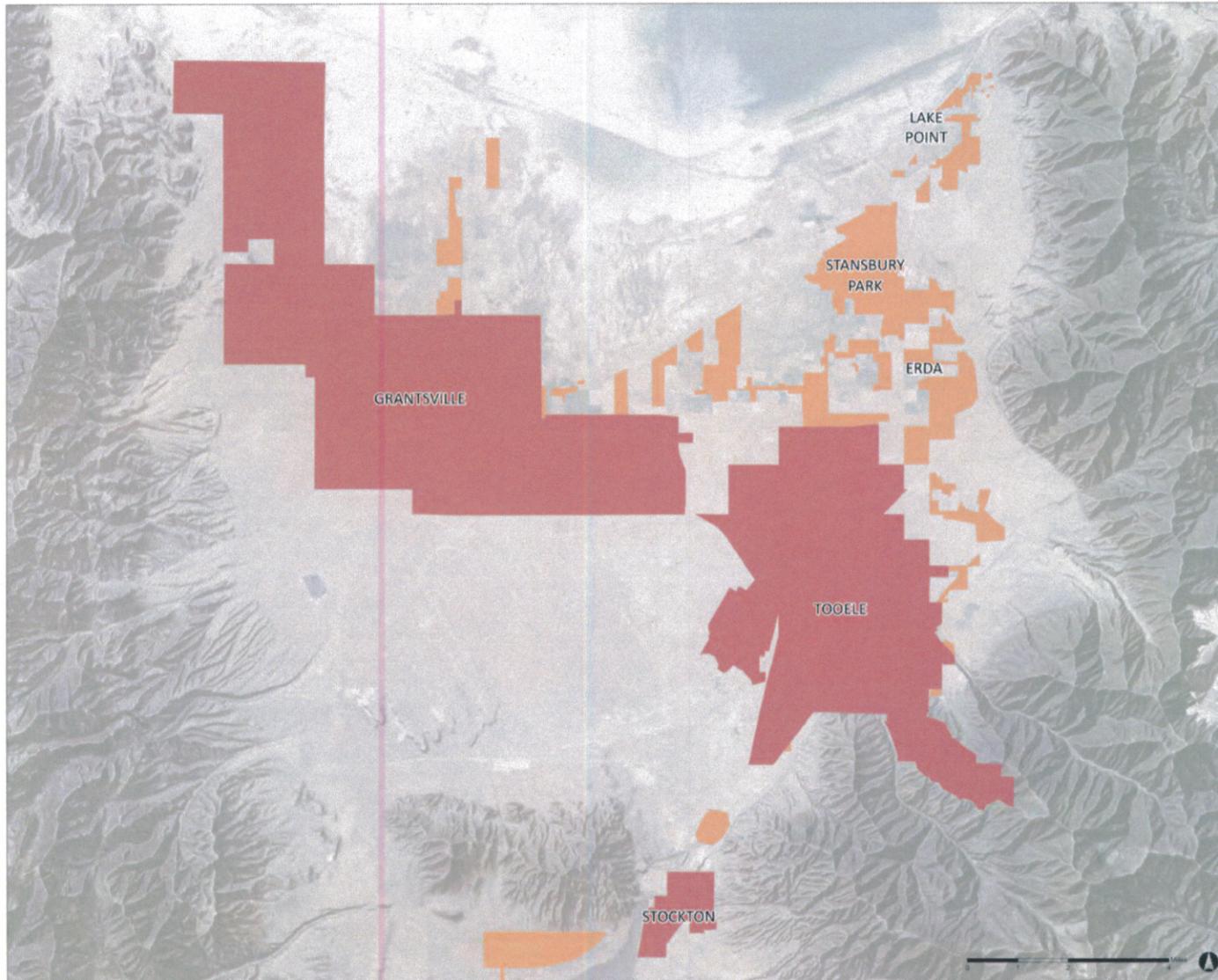
Held on the evening of December 9, 2015 at the Tooele County Building

SUMMARY OF INPUT PENDING

Appendix B:

Determination of Land Available for Development

The following are drawings and maps which were developed as part of determining land available for future development in the Tooele Valley.



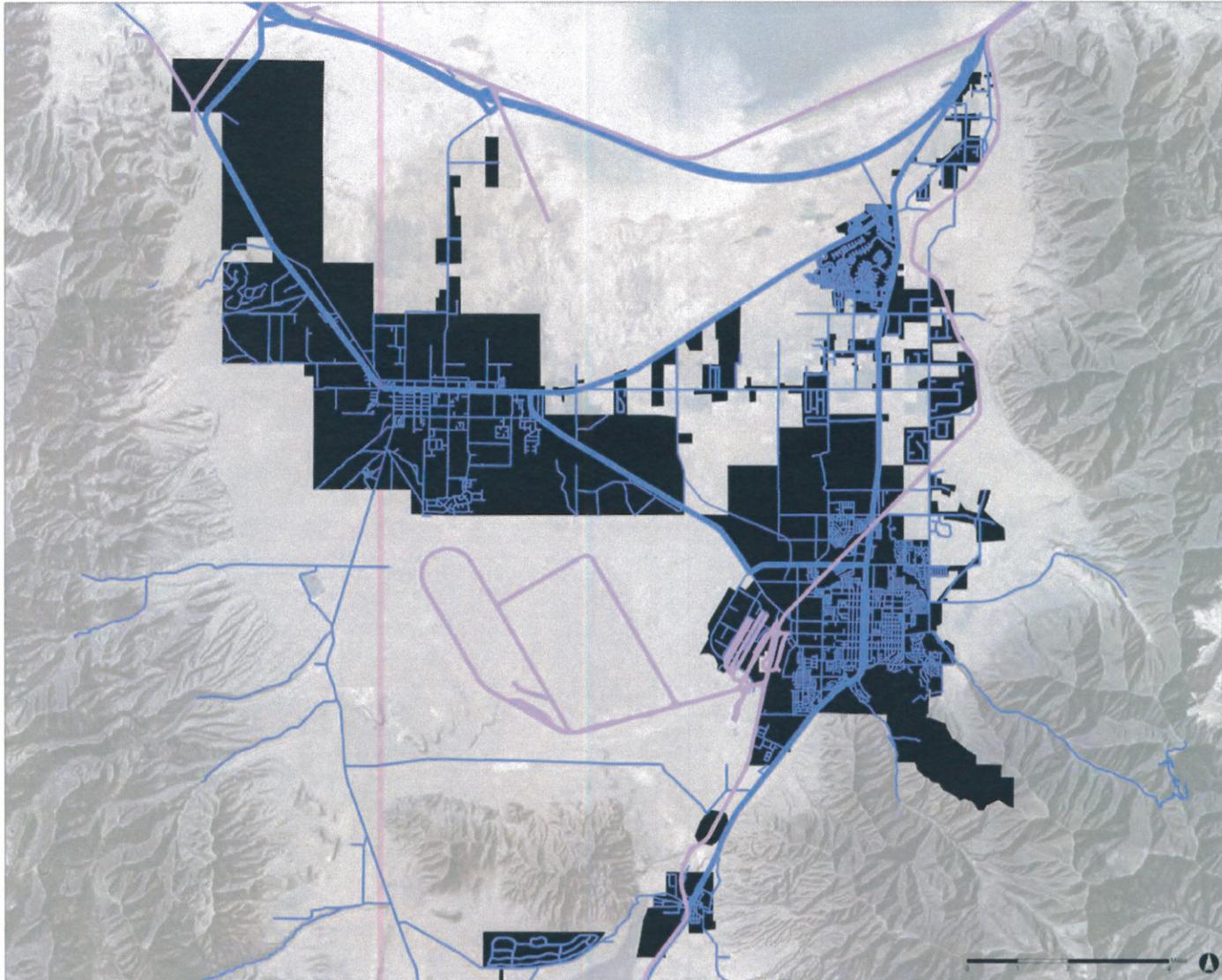
Developed Land

- Municipalities
- Developed Land



**Tooele County
General Plan Update**





Transportation Corridors

- Transportation Corridors
- Railroads
- Land Unavailable for Development



**Tooele County
General Plan Update**





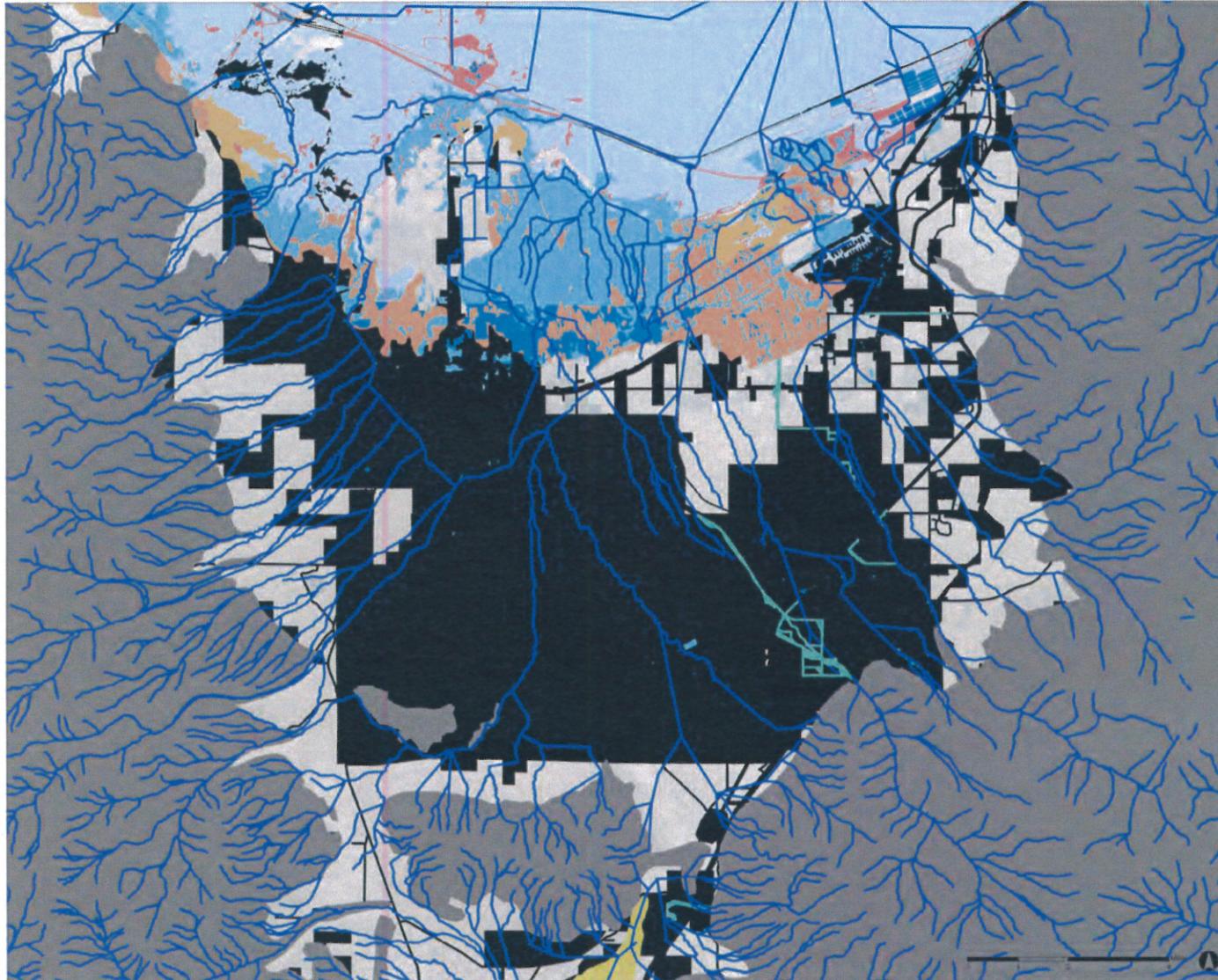
Jurisdictional Exclusion Areas

- Bureau of Land Management
- Military
- National Forest
- National Wilderness Area
- State Trust Lands
- Land Unavailable for Development



**Tooele County
General Plan Update**





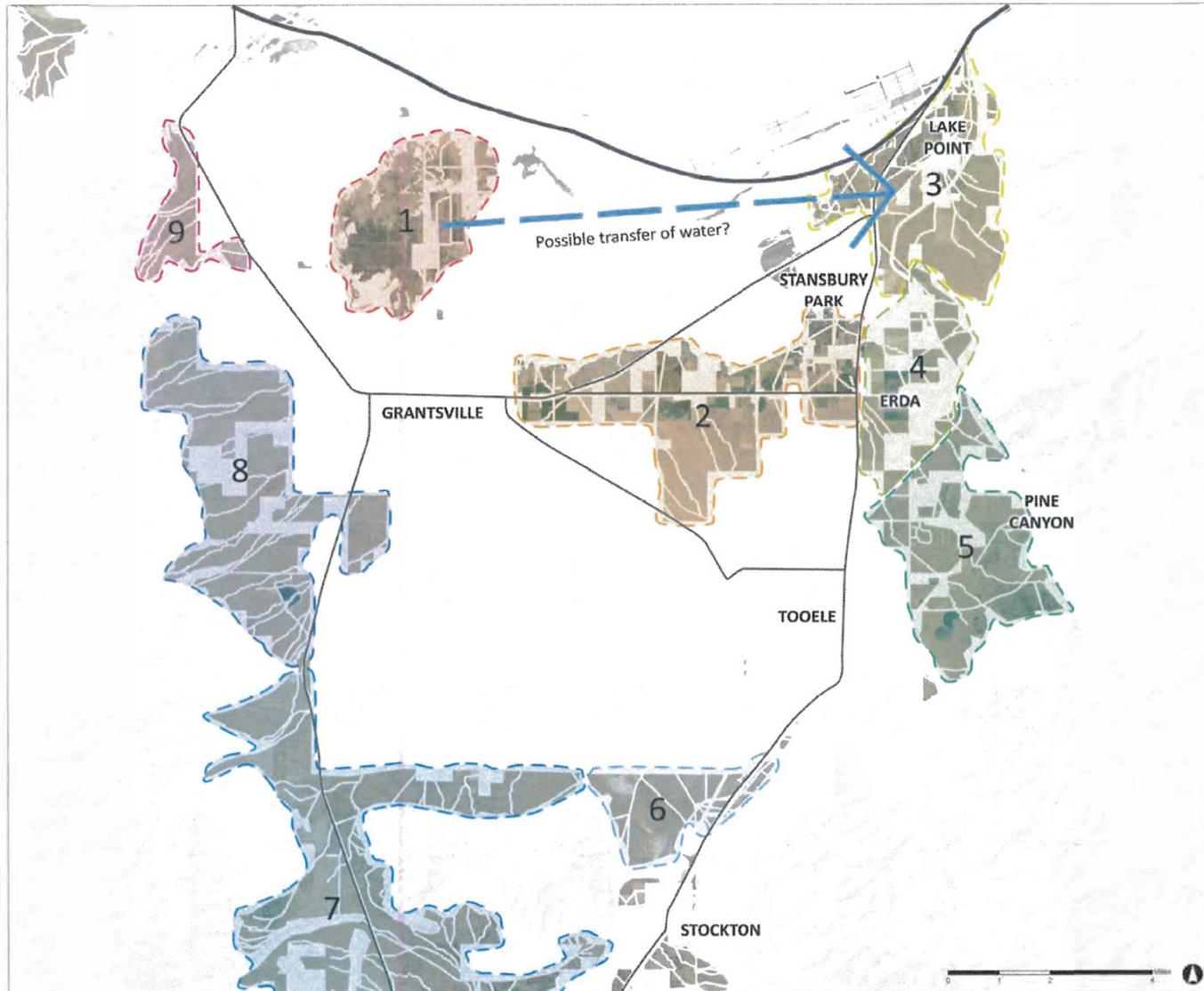
Natural Constraints

-  Streams
-  Floodplains
-  0-12 inches, LOGAN SILT LOAM
-  0-12 inches, SALTAIR-PLAYAS COMPLEX
-  24-36 inches, KANOSH-SALTAIR-LOGAN COMPLEX
-  More than 80 inches, SKUMPAH SILT LOAM, SALINE
-  Lake
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Slopes > 30%
-  Land Unavailable for Development



Tooele County General Plan Update





Area 1

- Location of springs/aquifer limits development potential
- Can water resource be feasibly transferred/piped to east?
- Development opportunity along roadway – West Valley Gateway/Welcome to Grantsville
- Clustered Development depends on access to water and sewer

Area 2

- Residential/neighborhood development has good potential
- Depends on access to water and sewer – can linkage be established with Stansbury Park or similar?
- Development limitations of existing airport must be honored
- Long-term expansion of airport and related impacts must be considered and planned
- Linking existing subdivisions/patterns of development with new development models (clustered development) is challenging
- Can provide unified link between Grantsville and Tooele

Area 3

- Lake Point has been planned for coordinated development/ partially approved
- Water rights north of Grantsville – can it be conveyed here? If so, what is impact on area surrounding water source?
- Important gateway and entry to valley - East Valley Gateway/Welcome to Tooele Valley

Area 4

- Erda – development agreements in existence for most of area
- Little to no potential for change without agreement of property owners
- Assume it is out of bounds?

Area 5

- Pine Canyon – primarily developed with available water rights
- Little to no potential for change?
- Assume it is out of bounds?

Area 6

- Contaminated land
- Little development potential
- Is clean up warranted?
- Protection of Stockton Bar essential – how to achieve?

Area 7

- Similar to Area 8
- Low density development/ use of septic assumed depending on access to water
- Rural development most likely scenario
- Unlikely to develop quickly
- Should additional development sustainable? Should it be supported?

Area 8

- Similar to Area 7
- Possible value for industrial development, depending on access to water/need for direct transportation linkage
- Unlikely to develop quickly
- Should additional development sustainable? Should it be supported?

Area 9

- Good location for industry
- Topography limits extents
- Depends on access to water/need for direct transportation linkage
- Unlikely to develop quickly
- Should additional development sustainable? Should it be supported?

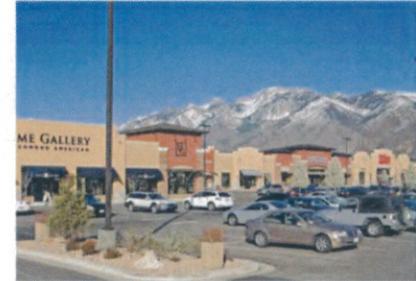
Appendix C:

Land Use Principles – Original Boards & Assessment of Public Input

Copies of the original Land Use Principles boards presented at the Public Workshop in September 2015 follow. These were reviewed by members of the public, who also provided input on the most representative and non-representative images for each (presented in Chapter 2). The result of this input was critical for developing planning concepts and for ensuring that the final plan was aligned with the public vision for the Tooele Valley.

LAND USE PRINCIPLE:

- 1 Create density and intensity near cities, services, and gathering places, including schools and city centers.



LAND USE PRINCIPLE:

- ② Use flexible and creative planning to achieve better neighborhood growth and development.



LAND USE PRINCIPLE:

- ③ Develop Tooele County into a self-sufficient region that includes adequate employment and service opportunities.



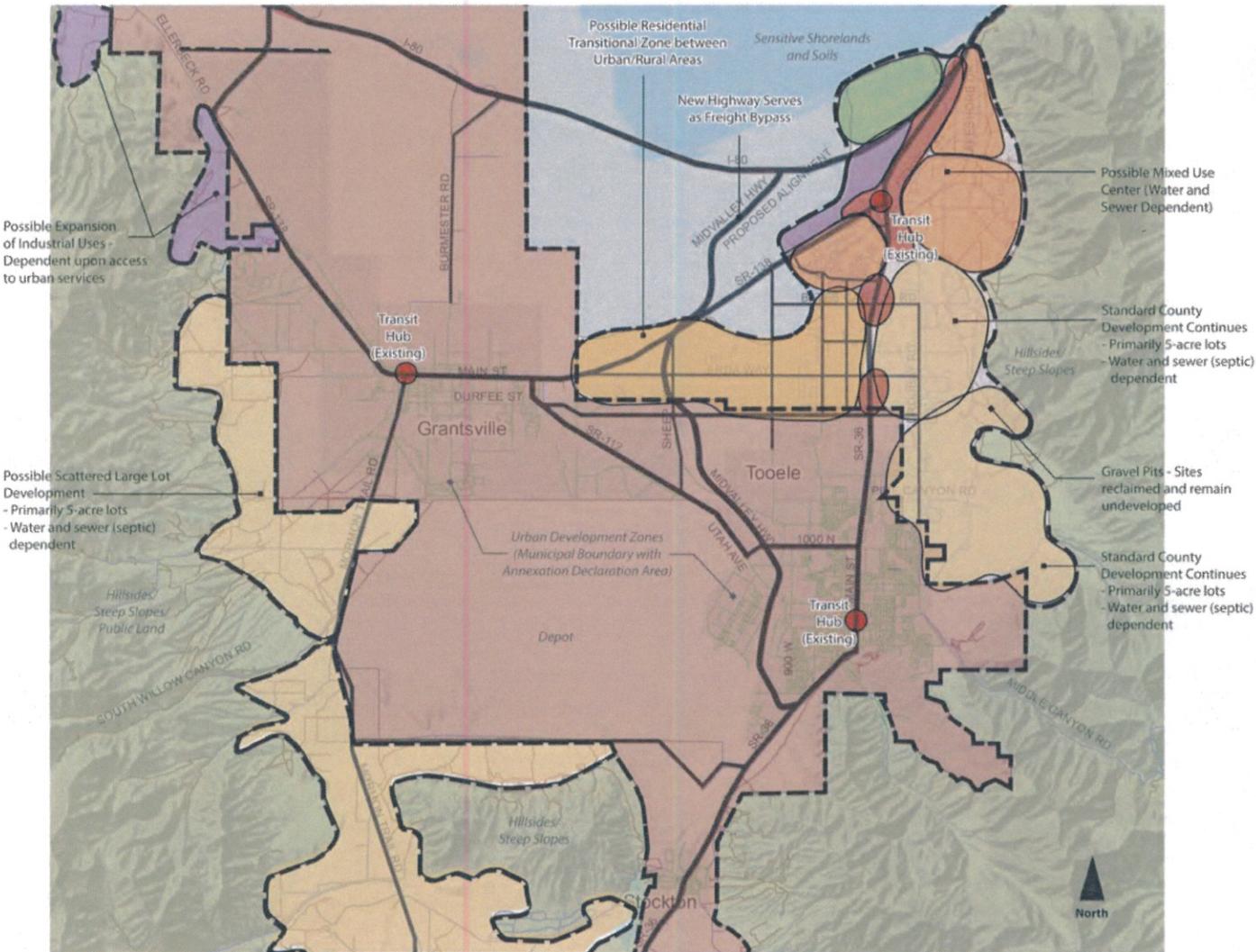
LAND USE PRINCIPLE:

- ④ Preserve public open lands, historic sites, cultural landscapes, and scenic resources as part of a comprehensive planning approach.



Appendix D:

Three Land Use Options

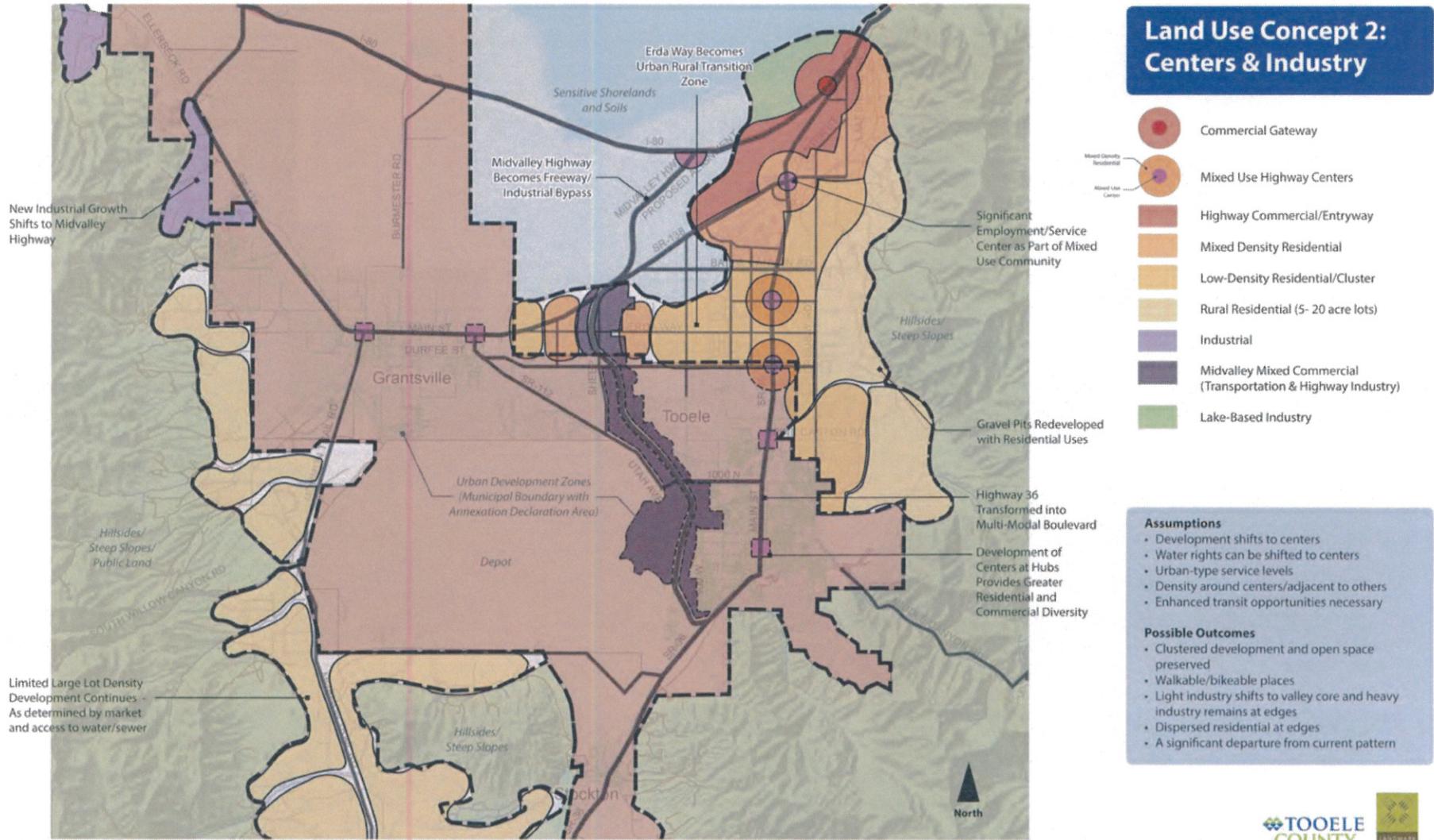


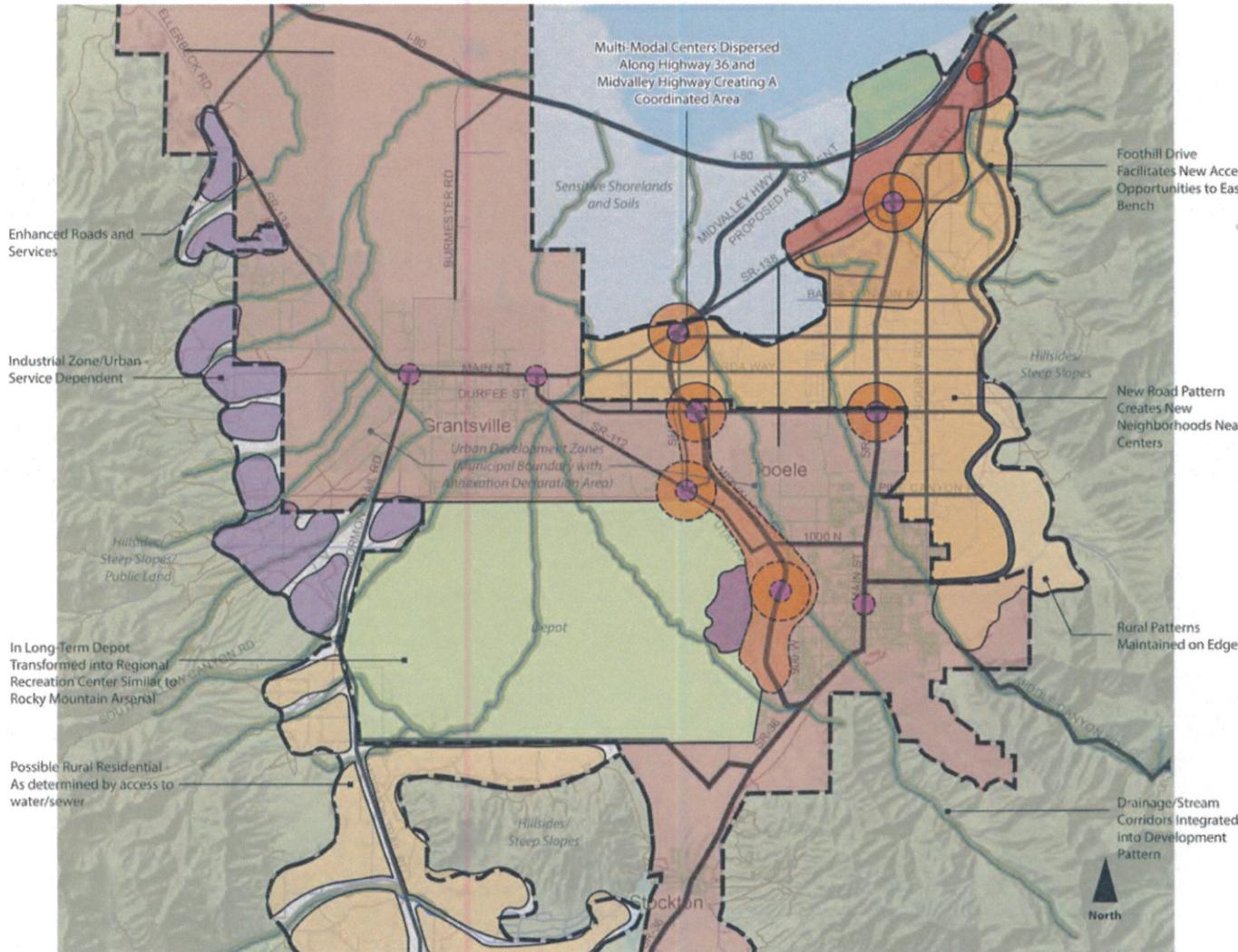
Land Use Concept 1: Baseline

- Commercial Strip Development
- Cluster/Mixed Density Residential
- Low-Density Residential (1 unit/acre, if water & sewer systems allow)
- Rural Residential (5- 20 acre lots)
- Industrial
- Lake-Based Industry
- Transit Centers

- Assumptions**
- Development continues as currently allowed
 - Primarily large lot residential
 - Growth and development controlled by access to water (which is limited) and sewer (septic) systems. Most feasible for 5-acre lots.
 - Strip commercial along SR-36 and Midvalley Highway
- Possible Outcomes**
- Scattered development pattern continues
 - Inefficient/costly utilities and infrastructure
 - Long commutes to work continue
 - Bedroom community to Wasatch Front continues







Land Use Concept 3: Dispersed Centers/Unified Structure

- Commercial Gateway
- Multi-modal Mixed Use Center
- Commercial Gateway
- Mixed Density Residential
- Density Residential (3+ units/acre)
- Mixed Density Residential (1-3 units/acre)
- Rural Residential (5- 20 acre lots)
- Industrial Park
- Green Industry
- Regional Park Attraction (Long-Term)
- Greenways/Open Space Corridors

- Assumptions**
- Development shifts to centers
 - Water rights can be shifted to centers
 - Urban-type service levels
 - Density around centers/adjacent to others
 - Enhanced transit opportunities necessary
- Possible Outcomes**
- Clustered development and open space preserved
 - Walkable/bikeable places
 - Light industry shifts to valley core and heavy industry remains at edges
 - Dispersed residential at edges
 - Valley becomes job/service independent
 - An extreme departure from current pattern



Appendix E:

Clustered Development Model Ordinances

A checklist for clustered development prepared by LandChoices (www.landchoices.org) is provided in the ensuing pages, followed by three model ordinances:

- Kennebec Valley Council of Governments, Model Open Space Subdivision Ordinance, Kennebec, Maine, July 2009
- Georgia Office of Planning and Quality Growth, Special Growth Management Techniques, Georgia Department of Community Affairs, 2002/2007
- American Planning Association, Model Smart Growth Land Development Regulations , Model Residential Cluster Development Ordinance, MODEL, Interim PAS Report, 2006

These resources are not meant for the direct development of an improved clustered development ordinance, but as review and inspiration as that process unfolds. Additional model ordinances from the local region may also readily available through the Utah Chapter of American Planning Association, Wasatch front Regional Council, EnvisionUtah, The Utah League of Cities and Towns, and similar organizations/agencies in Utah.

LandChoices

Checklist for Preserving Clean Water, Natural Areas, Wildlife and Working Farmland (www.landchoices.org)

1. **Inexpensive Preliminary Sketch Plan**

Include a sketch plan of greenway land, potential house sites, street alignments, and tentative lot lines, prepared according to the four-step design process for creating conservation subdivisions showing areas of proposed development and areas of proposed conservation.

This is to be prepared by a landscape architect or physical planner as the first layout document BEFORE expensive and highly detailed design drawings are created for the Preliminary Plan stage. This way any deficiencies can be corrected PRIOR to submission of the detailed, expensive Preliminary Plan.

The sketch plan is a carefully drawn rendition, done to a specific scale, and usually created as an Overlay Map to be lain on top of the underlying Existing Features/Site Analysis Map. They are always best done when done by hand, not on a computer screen.

They can be done in the field, or right afterwards, at a "mini-charrette" involving all parties concerned.

2. **Conduct a Site Walk On the Property**

Include all involved in the process-the developer, planning commission members, abutting landowners, officials, staff, etc. - BEFORE any engineering plans are put into place in order to point out the conservation areas to be preserved.

Important Note: Site walks should be advertised in the usual manner as informal Work Sessions, open to the public, at which no votes or binding decisions are taken. Site walks do not add more time, as they help the process move far more quickly, since people are no longer talking and arguing about abstract lines on paper, but real slopes, actual trees, etc., which means they really understand the site conditions. There is no substitute whatsoever for seeing the land first-hand.

3. **Qualified Landscape Architect and Physical Planner Experienced in Designing Conservation Subdivisions be Involved from the Beginning of the Project**

This is absolutely necessary.

In the book *Envisioning Better Communities* by Randall Arendt (American Planning Association, 2010, page 21), Arendt writes, "subdivision regulations typically suffer from five fundamental flaws, resulting in flawed designs." Flaw #4: "Layouts are typically prepared by surveyors and engineers who are trained in recording site data and in street and drainage issues. They have little or no expertise in the fields of landscape architecture or neighborhood design and therefore often fail to capitalize on the significant physical, historic, and environmental features of each property."

4. Existing Features Site Analysis Map

The official time clock for review starts with the submission of this plan at the on-site walkabout or at a regularly scheduled meeting of the Planning Commission.

More Information on Methods in the First Four Steps (steps 1-4)

["Flawed Processes, Flawed Results, and a Potential Solution"](#) (PDF) (5 pages)(PDF) (5 pages)

5. Safer, Less-Wide Streets

Allow safer, less-wide streets, eliminate curb and gutters (use swales instead to absorb excess water, along with rain gardens) to lower costs, recharge groundwater, and reduce storm water run off and pollution. Learn More at [Greener Streets: Enhancing Livability and Neighborhood Values through Greener Engineering Practices](#) (PDF)

6. Preserve a Minimum of 50%¹ of the BUILDABLE Land

This is in addition to the unbuildable wetlands, steep slopes and floodplains in new subdivisions.

7. Conservation Subdivision Design*

Implement Conservation Subdivisions into your ordinance
Download the following for further reference:

[LandChoices' approved conservation subdivision ordinance*](#)(doc) (61 pages) (417k) Courtesy of Walworth County, WI

[Ordinance Amendments](#) (Doc.) (2 pages)

[Conservation Subdivision Design: A Brief Overview](#) (PDF)

[Case Study: Indian Walk](#) (PDF) (2 pages)

[Case Study: West Vincent Township](#) (PDF) (2 pages)

*LandChoices does not warrant that this provision complies with your state's laws. As such you are advised to consult with an attorney that is familiar with your state's laws.

8. Conservation Subdivisions Designated as a "By-right Permitted Use" option

Designate conventional subdivision layouts as "Conditional Uses" or "Special Exemptions".

9. Create Interconnected Open Space Networks

Link together the conserved land in conservation subdivisions.

¹ In urban, sewerred, high density areas zoned at 2-3-4 units per acre, preserving 30-35% open space, in addition to the unbuildable wetlands, floodplains, and steep slopes, is the norm. In rural, suburban edge areas at densities of 5 and 10 acres per dwelling, where most of America's new subdivisions are being and will be built, easily 70% (or more) of the land can be preserved.

1. Model Open Space Subdivision Ordinance Kennebec Valley Council of Governments Kennebec, Maine July 2009

Introduction

Low-density development is altering the rural landscape of Maine. The State converted over 869,000 acres of rural land to suburban uses from 1980 to 2000 second only to Virginia in proportional change according to the 2006 Brookings Institute report “Charting Maine’s Future: An Action Plan for Promoting Sustainable Prosperity and Quality of Places”. This represents a loss of 1300 square miles of rural land, a territory roughly the size of Rhode Island. As the report lists the costs of sprawl it asserts that the greatest concern is that this low-density development is undermining Maine’s brand, its rural character and special quality of life that remains the heart of the State’s current and future economy. Put another way becoming more like “Anywhere USA” is bad for Maine’s economy and environment.

Most Maine communities with Comprehensive Plans (and many towns without such plans) evidence a strong concern about loss of open space, farmland, and rural character. Local attitude surveys that often accompany these plans invariably show high levels of support for protecting open space, farmland, and rural character. Protecting rural character is a primary goal in practically every local Comprehensive Plan. Not surprisingly many municipalities have adopted cluster development ordinances with purposes that reflect this and other related goals. Typical purposes of these ordinances include: “to provide for the efficient use of land and the preservation of open space, farmland and rural character; to provide for

development in harmony with natural features of the land; to encourage the efficient use of infrastructure; to protect environmentally sensitive areas; to encourage affordable housing; ...”.

Open space subdivisions can provide economic, environmental and social benefits to a community as well as advantages for developers. Site development costs are decreased by designing with the terrain. Infrastructure and the service costs to maintain it are reduced because roads and water and sewer lines are almost always shorter. School buses, snow plows, rubbish trucks and other service vehicles will have shorter routes. Reduced costs to develop lots can incentivize including some affordable housing as part of the project. The protected open space provides residents with recreational opportunities and scenic views. Added amenities from adjacent protected open space increase home resale value and enhance marketing. Homes in open space subdivisions appreciate faster than those in conventional subdivisions. Such developments can protect unique, fragile and significant wildlife and plant habitats. Open space subdivisions reduce the pollution impacts from storm water runoff and promote aquifer recharge. Clustered housing with neighborhood trails encourages more frequent interactions with one’s neighbors, fostering a sense of community. A larger open space network (green infrastructure) can be created if open space is connected across several developments and potentially support recreational trail networks and wildlife habitat links. Although open space subdivisions offer many benefits these developments are a partial essential prescription to protecting community rural character, etc.. Creation and implementation of a local open space plan that has identified high value natural areas including farmland for protection is also essential.

Open space subdivisions intentionally (or should intentionally) include important features in protected open space. Traditional cluster subdivisions typically do not. Unfortunately most cluster subdivision ordinances fail to accomplish their purposes. Many of these ordinances lack site design criteria for locating lots and open space. Some of these design criteria direct new construction to locations on the site where buildings can be absorbed by natural landscape features. Many cluster subdivision ordinances set aside too little open space in rural districts. Several studies show that rural character breaks down when open space percentage falls below 60 – 70 percent. Cluster subdivisions are often optional and not mandated. Developers typically do not choose a development option that they're unfamiliar with. When open space subdivisions are optional most if not all subdivisions in that municipality will continue to be conventional. A preliminary review that maps site constraints and opportunities and designs the subdivision around these features is also often absent.

This model open space subdivision ordinance strives to address these and other typical deficiencies so that the typical purposes (listed earlier in this introduction) expressed at the beginning of most cluster subdivision ordinances can be achieved. This model mandates open space subdivisions in rural districts while assuring that the same number of lots allowed for a conventional subdivision is allowed for an open space subdivision. A pre-application review is required that includes a site inventory map and a conceptual (sketch) plan for the proposed development. Site design standards for lot and open space location are part of the ordinance. Open space ownership, use and maintenance standards are also included.

This model ordinance is designed to fit into an existing local land use ordinance, which has a review structure. It is not a stand-alone

ordinance. Application of this ordinance should be reviewed by a municipal attorney prior to adoption.

This model ordinance is a product of reviewing numerous ordinances and reports related to open space subdivisions. Feedback from Planning Board members at open space subdivision workshops was appreciated and useful. Appreciation also extends to Chris Huck and Jen Boothroyd respectively Planning Director and Community Planner at KVCOG for review comments. This model ordinance was prepared by Fred Snow Community Planner at KVCOG.

Model Open Space Subdivision Ordinance Kennebec Valley Council of Governments

Model Regulations

1.0 Purpose

The purposes of these provisions are:

1. To provide for efficient use of the land and the preservation of open space, farmland, and rural character;
2. To provide for development in harmony with the natural features of the land that is consistent with historic land use patterns of village-like areas where residences are grouped, surrounded by areas of open space used for agriculture, forestry, recreation and similar purposes;
3. To protect high value natural areas;
4. To reduce the impacts on water resources by minimizing land disturbance and creation of impervious surfaces and stormwater runoff;
5. To encourage efficient use of infrastructure.

2.0 Applicability

1. The provisions of this ordinance apply to all major subdivisions.
2. The provisions of this ordinance shall be mandatory for all major subdivisions in rural district(s) or rural area(s) except as otherwise noted. Open space subdivisions (OSS) have not worked as an option to conventional subdivisions even with density bonuses. Mandating OSS is best. Some towns require either OSS or 10 acre lots but that approach can promote large lot sprawl.
3. The provisions of this ordinance shall be [mandatory] for all major subdivisions in village district(s) or village area(s)
Note: A word(s) in brackets [] indicates that this is recommended and/or that there are options or specifics to fill in.

3.0 Definitions

Buildable Area. Land area of a parcel excluding Unbuildable Area.

Building Envelope. The area formed by front, side, and rear building restrictions or setback lines of a lot within which development including clearing, excavation, and grading and structures shall be contained. This means a building envelope within each house lot not a building envelope of overall buildable area.

Open Space, Designated. Reserved land that is permanently protected from further development and remains in a natural condition or is managed according to an approved management plan for natural resource functions, e.g. habitat

protection, passive recreation, agriculture, forestry or some combination of these.

Open Space Percentage. The percentage of Buildable Area that's required to be part of designated open space.

Primary Conservation Area. Those Unbuildable Areas that include steep slopes (20% or more), hydric soils, wetlands, and surface waters including intermittent streams.

Secondary Conservation Areas. Those areas with significant features that include open fields, high value natural areas, prime USDA agricultural soils, mature woodlands, stone walls, tree lines, existing historic structures, scenic views into and out of the property, trails and hilltops.

Subdivision, Future. A proposed or potential subdivision subsequent to an initial subdivision on the same parent parcel. Note: the number of future lots, a delineated area that will contain all future lots, and a delineated area for future designated open space must be established according to requirements of this Ordinance prior to and shall not be altered subsequent to an initial approved Minor or Major Subdivision.

Subdivision, Minor. A subdivision with up to 4 lots. Note: minor subdivisions are not required to be Open Space Subdivisions.

Subdivision, Major. A subdivision with five or more lots. Note: major subdivisions shall be Open Space Subdivisions.

Subdivision, Open Space. An alternative form of residential development where, instead of subdividing an entire tract into lots of conventional size, the same or a similar, number of housing units are arranged on lots of reduced dimensions, with the remaining area of the parcel permanently protected as Designated Open Space. Open space subdivisions (OSS) differ from traditional “clustering” in three important ways. First OSS is intentional about quality of open space meaning significant features are included and protected. Second, in rural areas OSS lots are absorbed into the landscape when possible according to site design criteria rather than just put somewhere on the site that’s buildable. Third, OSS strives to help create an interconnected open space network in the community.

Unbuildable Area. Land area that cannot be counted toward the minimum lot size under a conventional subdivision and includes steep slopes (20% or more), hydric soils, wetlands, surface water, rights of ways and easements, Resource Protection District, flood ways and coastal high hazard zones and portions used for storm water management facilities.

4.0 Pre-application Review

All applicants for review of major subdivisions are required to participate in a pre-application review process with the Municipal Reviewing Authority. The purpose of this process is to discuss the characteristics of the site and proposed plan for development in conceptual terms. The preliminary review shall be conducted following notification to abutters and the general public. Public input will be accepted. This supplements the municipality’s formal application procedure which should be reviewed to provide consistency. This

approach provides essential site design information early in the review process which often saves developers money by not requiring high engineering costs upfront and by reducing the likelihood of costly major plan revisions later on. In other words pre-application review can expedite the formal application process and review.

1. Pre-application Discussion. A pre-application discussion is strongly encouraged between the applicant, site designer(s), and the Municipal reviewing Authority. The purpose of this informal meeting is to introduce the applicant and site designer(s) to the municipality’s zoning and subdivision regulations and discuss the applicant’s objectives in relation to those requirements. The applicant may choose to bring a Site Context Map and an Existing Features Plan to this meeting.
2. Site Context Map. The site context map shall be drawn to a size adequate to show the relationship of the proposed subdivision to adjacent properties and to locate the subdivision within the municipality, e.g., 1 inch = 400 feet. The site context map shall include the following:
 1. An outline of subject parcel along with abutting properties perhaps from a tax map and current uses on those properties.
 2. Existing subdivisions in proximity of the subject parcel.
 3. An outline of the subject parcel on a USGS topographic map.
 4. Zoning district.
 5. Tax map and lot number of subject parcel.
 6. Watershed description.
 7. Location and names of existing streets.

8. Location of circle showing features within half mile of subject parcel on Beginning with Habitat High Value Habitats map. The State municipal map if available can be downloaded from www.beginningwithhabitat.org/the_maps/map_availability.html
3. Existing Features (Site Inventory) Map. The site inventory map(s) shall be at a scale of one inch equals 100 feet (unless another scale is mutually agreed upon) and shall involve an individual or team with the necessary training in natural resources, preferably a landscape architect, and who shall certify the information submitted. The inventory and map(s) shall include, at a minimum, the following:
1. The proposed name of the subdivision, north arrow, date and scale.
 2. The boundaries of the parcel based upon a standard boundary survey prepared by a registered land surveyor and giving the bearings and distances of all property lines.
 3. A contour map based at least upon topographic maps published by the U.S. Geological Survey.
 4. The location and delineation of Primary Conservation Areas. (Note a high intensity soils map based on test pits may be advantageous in determining less area with hydric soils.) The total acreage of Primary Conservation areas shall be included.
 5. The location and delineation of existing buildings and unbuildable areas that are not Primary Conservation Areas including rights-of-ways and easements, portions in Resource Protection district, and portions utilized for storm water management facilities.

6. The location and delineation of any Essential Habitat Areas onsite or within 250 feet of the subdivision and any other important habitat areas onsite indicated on State Beginning with Habitat maps
 7. Identification of scenic views into and out from the property with accompanying photos and location and delineation of other Secondary Conservation Areas. The total acreage of Secondary Conservation Areas when applicable shall be included.
 8. The identification and location of vegetative cover on the property
4. Calculations. Applicants shall provide:
1. Minimum Lot Size. Applicable minimum lot size in the zone project is located in.
 2. Unbuildable Land. Total acreage of Unbuildable Land. Include and total applicable elements from list in section 10.3.
 3. Number of Allowable Lots. Number of allowable lots according to formula in section 6.3 The number of allowable lots is based on the number of allowable lots permitted under conventional zoning or subdivision ordinance. Municipality should have an unbuildable area provision but if it's lacking then assume unbuildable area of 15%.
 4. Open Space Set Aside. Provide total acreage of designated open space that shall be set aside using formula in section 6.4.
 5. On-Site Visit. After the Existing Features Plan has been prepared, the Planning Board shall schedule an

on-site visit to walk the property with the applicant and the site designer. The applicant shall bring a copy of the Existing Features Plan to the on-site visit. The purpose of this visit is to familiarize Town officials with the property's special features, and to provide them an informal opportunity to offer guidance (or at least a response) to the applicant regarding the location of the Secondary Conservation Areas and potential house locations and street alignments. How the "four step process" to designing subdivisions in section 4.6 could be applied to the subject property should also be discussed.

6. Conceptual Plan of Proposed Development. Applicants shall submit a conceptual plan for the development of the subject parcel that reflects the characteristics of the site as detailed in the site inventory and map(s) and its location within the community as indicated in the site context map. The conceptual plan shall be prepared at the same scale as the site inventory map and be provided as both a translucent sheet, which can be overlaid onto the site inventory map(s), and solid plan. A conceptual plan shall be a draft plan, which does not include engineering details, but is drawn to scale and indicates the following:
 1. Proposed location of any new road(s) or common driveway(s).
 2. Proposed residential lots, building envelopes, and potential house sites for each lot.

3. Existing and proposed features and amenities, including common areas, trails, or community buildings, etc.
4. Proposed boundaries of the designated open space.
5. A narrative description of the proposed approach for providing for drinking water supply, waste water treatment, stormwater management, and landscaping.

Applicants shall demonstrate that their conceptual plan is consistent with the following approach for designing a subdivision:

- a. Step One: Identify Conservation Areas. All Primary and Secondary Conservation Areas and unbuildable areas shall be identified and when applicable shall be delineated.
- b. Step Two: Locate House Sites. To the maximum extent feasible, house sites shall be located outside of those areas delineated in Step One. The location of the house sites shall also reflect the design objectives identified in section 8.0.
- c. Step Three: Align Streets, Common Driveways and Trails. The minimum length and network of road(s) necessary to access each house lot shall be identified. Common driveways shall also be identified. Roads and common driveways shall be located in such a way that avoids or at least minimizes adverse impacts on both Primary and Secondary Conservation Areas e.g. when possible these access ways shall not be located in open fields unless along part of field perimeter or along a tree line. Proposed trails shall be identified where access to the designated open space is appropriate and/or to provide for pedestrian

- circulation within the development as well as pedestrian access to areas outside the development.
- d. Step Four: Identify Lot Lines and Building Envelopes. Lot lines and building envelopes for each house site, or group of homes on a common lot, shall be identified. The placement of lot lines and building envelopes shall give consideration to those areas identified in Step One as well as conform to the natural features of the landscape to the greatest extent possible, e.g., follow stone walls, lines of boundary trees, streams. The delineation of lots shall also consider the privacy provided for individual homeowners.
7. Conceptual Long Range Development Plan. When a subdivision will not utilize the entire parcel and there is potential for future subdivision or development of the parcel or any of the lots being created, the application shall include a conceptual long-range development plan showing the potential utilization of the lots and the balance of the parcel not being subdivided. The conceptual long range development plan is a sketch plan with no engineering details, intended to be conceptual in nature, to rely on published data about natural resources relevant to the parcel, and to demonstrate that the current subdivision proposal will not compromise important conservation values or the long term development of the parcel as a conservation design subdivision. This plan shall show the relationship of the proposed subdivision area to the balance of the parcel and to adjacent land. This plan shall analyze the conservation and development potential of the

remaining area of the parcel and shall identify and delineate future designated open space area(s), and development area(s) in a manner that demonstrates that both the proposed development and the future development can occur so that it conforms to the requirements for conservation design subdivisions and preserves the significant natural resource and conservation values of the entire parcel. The number of future lots allowed and number of future lots proposed must be shown on the plan. After an initial subdivision has been approved the number of lots for the entire parcel and the boundaries of future area(s) to be developed and future area(s) to be protected as designated open space cannot be changed. The size of future lots can be altered.

5.0 Formal Application Procedure

[A community should evaluate its existing formal application procedure for consistency. Much of the information from the preliminary application process could be applied to the formal application process, which typically concerns a preliminary subdivision plan and a final plan. Because of opportunity for public input during preliminary review the Planning Board may opt not to hold a public hearing to expedite review.]

6.0 Maximum Density and Open Space

1. Growth (and/or Village) Open Space Percentage. Growth (and/or Village) district(s) shall have an Open Space

Percentage of [30] percent for open space subdivisions.

Percent of open space often varies by zone. 30% is suggested minimum for growth district but it could be as low as 20% or more than 30%.

2. Rural Open Space Percentage. Rural district(s) shall have an Open Space Percentage of 60 percent for open space subdivisions. One planning researcher found that rural character breaks down as open space percentage (OSP) in rural area fall below 70%. He found that metro farms require a minimum of 75% OSP and general agriculture (dairy farms, etc.) require a minimum of 85%. Two other researchers found rural areas typically have 60% to 80% OSPs.

3. Number of Allowable Lots. The total number of residential units allowable within an open space subdivision shall equal but not exceed the number of units that would otherwise be allowed in a conventional subdivision in an existing zoning district unless a density bonus is granted per Section 7.0. The total number of dwelling units allowed shall be determined by the following formula: See comment for 4.4.c.

Total Dwelling Units Allowed = Total Parcel minus Unbuildable Area divided by Minimum Lot Size

$$TU = (TP - UA) / MLS$$

- TU = Total Units Allowed (dwelling units)
- TP = Total Parcel (acres)
- UA = Unbuildable Area (acres)
- MLS = Minimum Lot Size (acres)

Note: If minimum lot size is in square feet round to nearest fraction of an acre e.g. a 20,000 square foot minimum lot size would be rounded up to half an acre.

4. Open Space Set Aside. The amount of Designated Open Space that shall be set aside shall be determined by the following formula:

Total Open Space Set Aside = Total Parcel minus Primary Conservation Areas multiplied by Open Space Percentage then added to Primary Conservation Areas

$$TO = ((TP - PC) OSP) + PC$$

TO = Total Open Space Set Aside (acres)

TP = Total Parcel (acres)

PC = Primary Conservation Areas (acres)

OSP = Open Space Percentage (% of Buildable Area)

Note: See Appendix 1 for examples of how these formulas are applied.

7.0 Density Bonuses

The Planning Board may grant a density bonus to an applicant who proposes affordable housing and/or a Low Impact Development approach as a component of the open space subdivision, in accordance with the following criteria:

Providing full public access or more protected open space are also actions a municipality might wish to incentivize. Incentives, which typically take the form

of additional dwelling units should however be used sparingly. Too many opportunities for applicants to increase the number of dwelling units allowed can reduce community support for using an open space approach.

1. Affordable Housing Bonus.

1. A 10% increase in the number of dwelling units allowed may be granted by the Planning Board if an applicant provides a minimum of 25% of units affordable for families meeting criteria of 80% to 120% of the County's median income. Such units may be either for sale or rent.

2. The Planning Board must approve a plan for long-term retention of the affordable units within that category.

2. Low Impact Development (LID) Bonus. A 10% increase in the number of dwelling units allowed may be granted by the Planning Board if LID practices according to Maine State Planning Office's "LID Guidance Manual for Maine Communities" are incorporated into the subdivision.

8.0 Design Standards

1. The following objectives for location of lots and designated open space shall be achieved to the greatest extent feasible in prioritized order: Site design criteria are essential in

determining quality of open space by intentionally making significant features part of protected open space.

1. Within Rural District(s):

1. Primary Conservation Areas in protected open space
2. Lots on or with access to suitable soils for subsurface wastewater disposal if no public sewer system
3. Lots within woodlands or if that's not possible along far edges of open fields preferably adjacent to woodlands (to enable new construction to be absorbed by natural landscape features) This criterion is essential in protecting the rural character of the site.
4. Lots where scenic views from public roadways are least likely to be blocked or interrupted
5. Essential habitats of rare, threatened or endangered wildlife and rare or exemplary plants and natural communities identified on State Beginning with Habitat maps in protected open space
6. Stream corridors and wildlife travel corridors with respective undisturbed vegetative buffers of 100 feet and 300 feet width in protected open space
7. Preservation of cultural features of the rural landscape, including significant trees, stonewalls, tree lines, and when feasible historic farmhouses and outbuildings. Significant trees, tree lines, and stonewalls and other important natural features not included within designated open space should be incorporated along the edges of individual lots or along a path or road, rather than transected by lot lines or a roadway.
8. High Value Plant and Animal Habitat areas identified on State Beginning with Habitat map and high value

- 9. natural areas identified in an adopted local or regional open space plan in protected open space
 - 10. Contiguous, usable area for agriculture or sustainable wood lot production in protected open space
 - 11. Lots where linkage with nearby open space on other properties is not blocked, and when possible, where continuous corridors of natural vegetation are protected in alignment with any adopted local or regional open space plan
 - 12. Lots avoid slopes exceeding 20% and tops of ridgelines
 - 13. Lots avoid natural drainage ways
 - 14. Class 1, 2, 3 agricultural soils as defined by USDA in protected open space
 - 15. Lots where greatest number of units could take maximum advantage of solar heating opportunities provided there is no or minimal conflict with other objectives
2. Within Village District(s):
- 1. Primary conservation areas in protected open space
 - 2. Preservation of cultural features of the village landscape, including stone walls, tree lines, and when feasible historic homes and outbuildings. A village-type layout of homes, consistent with the traditional New England style of development, will allow homes to be located closer together in much less space, while still creating a comfortable environment for residents and pedestrians.
 - 3. Lots where linkage with nearby open space on other properties is not blocked, and when possible, where continuous corridors of natural vegetation are

- 4. protected in alignment with any adopted local or regional open space plan
- 5. Lots where buildings will not interfere with solar access of other properties
- 6. Lots where greatest number of units could be designed to take maximum advantage of solar heating opportunities
- 7. Lots within woodlands contained in the parcel or that's not possible along far edges of open fields preferably adjacent to woodlands (to enable new construction to be absorbed by natural landscape features)
- 8. Lots where scenic views from public roads are least likely to be blocked or interrupted
- 9. Architectural compatibility of new construction with historic buildings in the community or region is [strongly recommended].

9.0 Open Space Ownership, Use, and Maintenance

The Designated Open Space created by the subdivision shall be:

- 1. Shown on the plat plan with the following notation: "Designated Open Space shall not be further subdivided or used for future building lots."
- 2. Shown on the plat plan including boundaries of Designated Open Space areas, active recreation area if any, agricultural area, and naturally, undisturbed vegetated areas and marked in the field with signage

approved by the Planning Board to distinguish these areas from private property.

3. Accessible to the owners or residents of the development, subject to any necessary limitations in connection with the uses of the land (e.g., farming), which may be permitted.
4. Uses. Limited to uses for passive recreation, or other passive outdoor activities, agriculture, forest management or individual or group septic systems, and for preserving the natural features of the site except as noted in section 10.18. Potential uses (e.g., farming) may be by the subdivider, owners or residents, or a lessee. The use of any open space may be further limited or controlled at the time of final subdivision approval as necessary to protect adjacent properties. Passive recreation would include walking, hiking, cross country skiing, horseback riding, bird watching, picnicking. Passive recreation is typically allowed in most of designated open space. However trails (usually foot paths) should be designed between lot owners.
5. Management Plan. Managed according to a management plan for the designated open space and facilities that's approved by the Planning Board, which includes the following:
 1. Identifies the entity assuming responsibility for stewardship and management of the designated open space, including regular inspections to confirm continued compliance

with the terms of the subdivision approval and conservation easement or deed restrictions. One approach to provide for long-term stewardship is to assess a fee at the time of subdivision approval to fund long-term monitoring. Most local and state organizations require a fee to cover their stewardship responsibilities when accepting an easement.

Municipalities might also require that homeowner education materials be developed to teach new homeowners about the appropriate uses and prohibited activities in the protected open space. The Municipal Reviewing Authority might discuss with the conservation commission how these materials will be developed, maintained and distributed to future homeowners.

2. Includes detailed standards and schedules for maintenance of the designated open space, including maintenance of vegetation.
3. Allows for municipal maintenance in the event that the maintenance specified under the agreement is not completed and recovery of costs incurred from the designated management entity or the owners of the designated open space within the subdivision.
4. Provides that any amendments to the plan shall be reviewed and approved by the Municipal Reviewing Authority.
5. Prior to the commencement of any timber harvesting a forest management plan defined by Title 36 MRSA Section 573.3-A shall be

submitted to the Municipal Reviewing Authority. The plan must be prepared by a licensed professional forester or a landowner and be reviewed and certified by a professional forester.

6. Ownership. Owned, preserved, and maintained as required by this section by any of the following mechanisms or combinations thereof:

1. Dedication of open space to the Town or a suitable land trust, if either is willing to accept the dedication.
2. Dedication of development rights of open space to a suitable land trust with ownership by a private individual or homeowners association.

Conservation easements are the preferred approach for larger areas of protected open space, especially for parcels containing high-valued natural resource or cultural features.

3. Ownership of the open space by a homeowners' association which assumes full responsibility for its maintenance with open space protection deed restrictions enforceable by any landowner in the subdivision, any owner of separate land parcels abutting the open space, or the municipality

4. Ownership by a private individual with open space protection deed restrictions enforceable by any land owner within the subdivision, any owner of separate land parcels abutting the open space, or the municipality. This option may apply only if open space is part of an existing farm, working or not, if there is a future intent to farm by the owner and no land trust is willing to accept dedication of development rights of the open space. A deed restriction is a restriction on the use of land usually set forth in the deed of a property. The restrictions would limit how the open is used, the structures that would be allowed on it and how the land should be maintained in perpetuity. Municipalities should provide sample language to the applicant to ensure effectiveness. Although deed restrictions are considered a less secure alternative, they can be an appropriate protection method for smaller parcels of land or for open spaces that are subject to more intensive uses.

7. Homeowner's Association. Controlled by a homeowners association in the event ownership options per sections 6.1, 2 and 4

are not exercised. If a homeowners' association (association) is to be formed it shall be incorporated by the developer prior to final subdivision approval. Covenants for mandatory membership in the association shall be approved by the Planning Board and included in the deed for each lot or unit. Draft by-laws of the proposed lot owners' association specifying the responsibilities and authority of the association, the operating procedures of the association and providing for proper capitalization of the association to cover the costs of major repairs, maintenance and replacement of common facilities shall also be subject to Planning Board approval. The association's documents shall specify that:

1. The association shall have the responsibility of maintaining the designated open space and other private facilities dedicated to the use in common by the development's resident.
2. The association shall levy annual charges against all property owners to defray the expenses, if any, connected with maintenance of the common open spaces and facilities.
3. The association shall have the power to place a lien on the property of members who fail to pay dues or assessments.

4. The developer shall maintain control of designated open spaces and facilities and be responsible for their maintenance until at least 51% of the development lots or units have been conveyed, with evidence of such completion and sales submitted to and approved by the Planning Board.

10.0 Other Standards

1. Professional Services. The Municipal Reviewing Authority may retain professional services, third-party technical review of information provided concerning the existing features map and conceptual plan of proposed development submitted for pre-application review and for formal application review including but not limited to an attorney or consultant. The attorney or consultant shall first estimate the reasonable cost of such review and the applicant shall deposit, with the municipality, the full estimated cost, which the municipality shall place in an escrow account. The municipality shall pay the attorney or consultant from the escrow account and reimburse the applicant if funds remain after payment.
2. Legal Review. Prior to final approval by the Municipal Reviewing Authority the applicant shall submit for review by the municipal attorney any restrictive covenants, conservation easement, deed restrictions or other legal agreements proposed for use in the open space subdivision. The municipal attorney shall advise the Municipal Reviewing Authority of the adequacy of such legal provisions. The applicant shall pay all associated costs of the legal review.

3. Unbuildable Area. Unbuildable area includes those portions of the lot:
 1. With hydric soils.
 2. Subject to rights-of-way or easements.
 3. Located in Resource Protection District.
 4. Covered by surface waters.
 5. Utilized for storm water management facilities.
 6. With slopes exceeding 20%.
 7. Ten (10) percent of the area of the lot to account for roads and parking.
 8. In a floodway or a coastal high hazard zone as designated in the Flood Boundary and Floodway Map prepared by the Federal Insurance Administration
4. Flexible Lot Dimensions. Reductions below the minimum otherwise required by this Ordinance for lot area, street frontage, and lot width are allowed for open space subdivision lots except that minimum lot size for subsurface disposal remains 20,000 square feet. Irregular lot shapes are allowed. In areas with public sewer and water particularly growth areas minimum lot size could be 10,000 square feet (SF) but shouldn't be less than 5000 SF.
5. Minimum Setback. The minimum setback of lot lines from edge of road pavement shall be 20 feet.
6. Parcel Boundary Setback and Buffer. Lots shall not be less than 50 feet from parcel boundary. A minimum 50 foot undisturbed buffer shall be established between lots and the parcel perimeter.
7. Privacy. To the extent practical, building sites shall be delineated to maximize the privacy afforded to each dwelling unit, by, for example, positioning homes to eliminate direct sight lines to neighboring homes. Single-loaded streets (houses on just one side of the street) are encouraged.
8. Green Lot Perimeter Strip. A green perimeter strip, not less than 25 feet wide shall be maintained with shrubs and trees along all lot lines except outside of wooded areas in designated growth districts or areas the front yard buffer strip may be vegetated with grass or flowers. Such a green strip shall not be built on or paved or used for parking or storage. There shall be no removal of trees over 4 inches in diameter within this buffer. Vegetation shall be retained in its natural state, although tree planting shall be permitted as a matter of right. A primary function of green perimeter strip of each lot especially along backyard sidelines and rear lines is to maintain privacy. Native vegetation should be required because it's more durable and helps avoid a suburban appearance.
9. Roadside Buffer. Outside of designated growth areas, a subdivision in which the land cover type at the time of application is forested, shall maintain an undisturbed wooded buffer strip no less than fifty feet in width along all existing public roads. The buffer may be broken only for driveways and streets.
10. Ridgelines. When a proposed subdivision contains a ridge line identified in the comprehensive plan as a visual resource to be protected, the plan shall restrict tree removal and prohibit building placement within 50 feet vertical distance of the ridge top. These restrictions shall appear as notes on the plan and as covenants in the deed.

11. Historic Resources. If any portion of the subdivision is designated a site of historic or prehistoric importance by the comprehensive plan, National Register of Historic Places, or the Maine Historic Preservation Commission, appropriate measures for the protection of the historic or prehistoric resources shall be included in the plan. When the historic features to be protected include buildings, the placement and the architectural design of new structures in the subdivision shall be similar to the historic structures. The Board shall seek the advice of the Maine Historic Preservation Commission in reviewing such plans.
12. Essential Habitat Buffer. At least a minimum 300 foot undisturbed natural buffer shall be established between development and any Essential Habitat Areas as mapped by Maine Department of Inland Fisheries and Wildlife (MDIFW) Beginning with Habitat program. The applicant shall provide review comments from MDIFW or Maine Natural Areas Program as applicable when essential habitat Areas have been identified.
13. Access Limit. Points of subdivision access to a single existing road shall not exceed two.
14. Roads.
 1. Roads serving open space subdivisions with up to 20 dwelling units shall have a minimum pavement width of 18 feet with a minimum shoulder width of 3 feet. Roads for all subdivisions shall have a maximum pavement width of twenty feet. Shoulders shall be topped with 2 -3 inches of loam and seeded with grass suited for the purpose.
 2. Where feasible, horizontal road alignments shall work with the topography and existing site conditions to follow the natural contours and avoid physical features that give the land its character.
 3. Open fields, agricultural lands and sensitive habitats should be crossed at the edges, preferably along hedgerows and tree lines when possible. Roadways shall avoid bisecting fields.
 4. Where feasible, proposed roads should follow any existing gravel/dirt road that has value as a local historic resource.
 5. When roads cross significant viewsheds in open fields, consideration shall be given to design approaches that will minimize their visual impact. These may include earth berms (designed with gently tapered side slopes), landscape screening using native shrubs, and 'ha-ha's' (an old English tradition which puts the roadway in a slight depression and out of view).
 6. Where existing roads must be widened to accommodate increased traffic volumes, care shall be taken to preserve mature roadside trees and other features which contribute to the road's character.
 7. Where drainage culverts are visible, the ends shall be cut off to follow the contour of the surrounding grade and/or covered with stone.
 8. Guardrails shall be constructed of wood or self-oxidized steel to avoid a harsh industrialized appearance.
15. Common Driveways. Common driveways are allowed and encouraged where appropriate to access individual lots. The following design and construction standards shall apply:

1. The maximum length shall not exceed 1000 feet.
 2. All common driveways in excess of 500 feet shall contain at least one 10 foot by 30 foot turnout. The exact location shall be determined by the Planning Board with the review of the Fire Department.
 3. The common driveway shall have a minimum 25 foot right of way (ROW) for up to 2 lots or dwelling units, and a minimum 50 foot ROW for over 2 lots or dwelling units.
 4. The travel way shall be 12 feet wide with 2 foot graded and grassed shoulders, and shall be located as close as possible to ROW centerline.
 5. The travel way shall be constructed of a minimum of 12 inches of gravel.
 6. Drainage ditches and culverts shall be provided as necessary.
16. Trails.
1. Trail improvements shall demonstrate adherence to principles of quality trail design.
 2. Trails shall have a vertical clearance of not less than 10 feet.
 3. The width of the trail surface may vary depending upon type of use to be accommodated , but in no case shall it be less than 3 feet or greater than 6 feet.
 4. No trail shall be designed with the intent to accommodate motorized vehicles.
 5. Trails except for points of access shall be no less than 50 feet from parcel boundary.
17. Mowing. Any portion of the designated open space not under cultivation which is comprised of open field or pasture shall be mowed at least once annually.
18. Open Space Contiguity. Reasonable efforts shall be made to locate designated open space adjacent to existing undeveloped land to form a continuous integrated open space system according to local or regional open space plan if any. At least 75% of designated open space shall be contiguous.
19. Shared Subsurface Disposal Systems. Shared subsurface disposal systems may be permitted in designated open space provided that requirements of the Maine State Plumbing Code are met, including appropriate provisions for legal obligations related to maintenance and replacement.
20. Underground Utilities. All utilities shall be installed underground unless specifically waived by the Planning Board. Transformer boxes, pumping stations and meters shall be located so as not to be unsightly or hazardous to the public.
21. Phosphorous Export. When a proposed subdivision is within the direct watershed of a Great Pond , the applicant shall make provisions to limit the export of phosphorus from the site following completion of the development, consistent with the maximum allowable phosphorus standard from Maine Department of Environmental Protection’s “Phosphorus Control in Lake Watersheds: A Technical Guide to Evaluating New Development”. This provision may already be in municipal zoning ordinance.
22. Active Recreation. Active recreation requires equipment and takes place at prescribed sites and includes tennis and other court games, swimming, baseball and other field sports and

playground activities. Active recreation shall be limited to one site, can encompass no more than one acre of the designated open space and must be screened from view in rural districts or areas except as noted further in this subsection. Any building associated with the active recreation site is limited to 400 square feet. When open space subdivisions are located in a growth area with zoning district density equal to or greater than 3 dwelling units per acre 25% of the designated open space up to a maximum of 3 acres can be used for active recreation including ball fields and total building footprint is limited to 1000 square feet.

23. Future Subdivision. When a subdivision will not utilize the entire parcel and there is a potential for future subdivision the total number of initial lots and future lots shall be provided and an area where future lots will be located and remaining area where protected open space will be designated shall be delineated according to the requirements for open space subdivisions. Once an initial subdivision has been approved the number of future lots and delineated areas of future development and future protected open space cannot be altered. Lot sizes can be changed within the future development area. A reason for this provision is that a certain percentage of the whole tract must be set aside as open space when a major subdivision is proposed. Primary conservation areas and secondary conservation areas from the whole tract must be incorporated in designated open space. If lots were sold in a minor subdivision prior to a revised proposal for a major subdivision on the same parcel it would invariably be impossible to include the primary and secondary conservation areas, which could be present in those sold lots. Thus a requirement in the ordinance could not be met. This provision is included so

that piecemeal submissions of minor subdivisions to avoid submission as a major (open space) subdivision can't happen thereby helping protect primary and secondary conservation areas.

Appendix 1:
Example of Applying Formulas That Determine Number of Allowable Lots and Amount of Open Space To Set Aside

Assume That a 100 acre parcel is being developed. Assume that the unbuildable area of the parcel is 10 acres. Assume that the minimum lot size in the zone is 2 acres. Assume that there are 8 acres of Primary Conservation areas. Assume that the open space percentage for the zone is 60% (or as a decimal .6).

The following formula would be used to determine the number of allowable lots:

Total Dwelling Units Allowed = Total Parcel minus Unbuildable Area divided by Minimum Lot Size

$$TU = (TP - UA) / MLS$$

TU	=	Total Units Allowed	
		(dwelling units)	
TP	=	Total Parcel	(acres)
UA	=	Unbuildable Area	(acres)
MLS	=	Minimum Lot Size	(acres)

Note: If minimum lot size is in square feet round to nearest fraction of an acre e.g. a 20,000 square foot minimum lot size would be rounded up to half an acre.

TO = 63 acres of Total Open Space Set Aside

TU = Total Units or Lots Allowed
TP = 100 acres Total Parcel
UA = 10 acres Unbuildable Area
MLS = 2 acres Minimum Lot Size

So a maximum of 45 lots could be developed on 37 acres
(100 – 63 = 37).

$TU = (100 - 10) / 2$
 $TU = 90 / 2$
TU = 45 Total Lots or Dwelling Units Allowed

The following formula would be used to determine the amount of open space to set aside:

Total Open Space Set Aside = Total Parcel minus Primary Conservation Areas multiplied by Open Space Percentage then added to Primary Conservation Areas

$$TO = ((TP - PC) \cdot OSP) + PC$$

TO = Total Open Space Set Aside (acres)
TP = Total Parcel (acres)
PC = Primary Conservation Areas (acres)
OSP = Open Space Percentage (% of Buildable Area)

TO = Total Open Space Set Aside
TP = 100 acres Total Parcel
PC = 8 acres Primary Conservation Areas
OSP = 60% (or .6) Open Space Percentage

$$TO = ((100 - 8) \cdot .6) + 8$$
$$TO = (92 \cdot .6) + 8$$
$$TO = (55.2) + 8$$

**2. Georgia Office of Planning and Quality Growth
 Planning and Environmental Management Division
 GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS
 First Published: April, 2002/ Updated June 2007
 Prepared for the State of Georgia Local Governments**

PART EIGHT: SPECIAL GROWTH MANAGEMENT TECHNIQUES

§8-1 RURAL CLUSTERING

§8-2 CORRIDOR MAP

§8-3 DEVELOPMENT AGREEMENT

§8-4 MAJOR PERMIT

§8-5 INTERIM DEVELOPMENT REGULATIONS

§8-6 AFFORDABLE HOUSING

§8-1 RURAL CLUSTERING

§8-1-1 TITLE

§8-1-2 PURPOSE AND INTENT

§8-1-3 DEFINITIONS

§8-1-4 APPLICABILITY

§8-1-5 RURAL CLUSTER MANDATE

§8-1-6 RELATIONSHIP TO LAND SUBDIVISION REGULATIONS

§8-1-7 DESIGN REQUIREMENTS RURAL CLUSTERS AND CLUSTER LOTS

§8-1-8 DESIGN REQUIREMENTS FOR REMAINDER PARCELS

§8-1-9 OTHER DESIGN REQUIREMENTS

§8-1-10 RESOURCE LAND AND OPEN SPACE RETENTION

§8-1-11

RESOURCE USE MANAGEMENT PLAN

§8-1-12

OWNERSHIP AND MANAGEMENT OF RESOURCE LAND OR OPEN SPACE

[See Commentary]

§8-1-1

TITLE

This Resolution [Ordinance] shall be known and may be cited as the "Rural Cluster" Resolution [Ordinance] of _____ County.

§8-1-2

PURPOSE AND INTENT

The purpose of this Resolution is to provide for small lot residential development in agricultural, forestry, and rural residential districts in a manner which maintains rural character, maintains and conserves larger remainder parcels, protects and/or enhances sensitive environmental and wildlife habitat areas, and minimizes impacts to necessary public services. This Resolution [Ordinance] is intended to help maintain resource lands and rural character by protecting, preserving and conserving existing resource lands, rural landscapes, and viewsheds. These goals are achieved by allowing the placement of homes on a small portion of the property, while maintaining the majority of the site in a remainder parcel which constitutes

resource land or open space. These regulations are consistent with, and are designed to implement, the goals and policies of the county's [city's] comprehensive plan as they relate to the protection of resource lands, the conservation of open spaces, and the maintenance of rural character.

§8-1-3 DEFINITIONS

Remainder parcel: The remainder parcel of the cluster provision that contains the majority of the land within the development and is devoted to open space, resource land, or other authorized use.

§8-1-4 APPLICABILITY

This Resolution [Ordinance] shall apply to all preliminary plat applications involving property in any area designated as agricultural/forestry in the county's comprehensive plan, or in any area designated for rural residential use in the county's comprehensive plan but which contains significant active agricultural or forestry operations. At its discretion, the Planning Commission may interpret this jurisdiction within a broader context, if the commission finds that public policies adopted by the local governing body support a broader jurisdiction than that stated in this section.

§8-1-5 RURAL CLUSTER MANDATE

§8-1-5.1

Planning Commission Authority. The Land Use Officer may recommend, and the Planning Commission is hereby authorized to require any applicant of a major subdivision in any area designated as agricultural/forestry in the county's

comprehensive plan, or in any area designated for rural residential use in the county's comprehensive plan but which contains significant active agricultural or forestry operations, to rearrange land subdivision proposals in a manner that complies with the purpose and intent and the specific provisions of this Resolution [Ordinance]. To this end, the Planning Commission is hereby authorized to deny a preliminary plat for property located in said agricultural/forestry or rural residential areas which does not meet the requirements of this Resolution [Ordinance]. The Planning Commission shall also be authorized to waive the requirements for minimum lot sizes, lot widths, and yards as may be required by the County's [City's] Land Use Intensity District [Zoning] Ordinance, in specific instances and upon application, but only to the minimum extent necessary to permit a cluster subdivision to comply with this Resolution [Ordinance]; provided, however, that the Planning Commission is not authorized to increase an overall gross density of development on a property that is otherwise not permitted by County [City] land use regulations.

§8-1-5.2

Additional Requirements. As part of the preliminary plat review process, the Land Use Officer or Planning Commission may require that the applicant identify agricultural, forestry, and open space land on the property proposed for subdivision. The Planning Commission may encourage efforts by the subdivider to preserve and/or promote agricultural, forest, or open space use and may require the retention of some of the usable agricultural or forest land or open spaces that meet the purpose and intent and specific provisions of this Resolution [Ordinance].

§8-1-5.3

Requirements for Denying a Preliminary Plat. To deny a subdivision plat under the authority of this Resolution [Ordinance], the Planning Commission or Land Use Officer must have informed the applicant of a rural cluster mandate and instructed the applicants on the requirements of this Resolution [Ordinance], and made a finding that the proposed preliminary plat has not been designed in accordance with the provisions of this Resolution [Ordinance] as broadly interpreted by the Land Use Officer and Planning Commission.

§8-1-5.4

Appeal. Any action by the Planning Commission's action to apply the rural cluster mandate or to otherwise invoke its authority pursuant to this chapter as applied to a specific property, upon approval of a preliminary plat requiring such mandate, may be appealed by the property owner to the Board of Appeals as provided for in Section 1.10 of this code.

§8-1-6

RELATIONSHIP TO LAND SUBDIVISION REGULATIONS

This Resolution [Ordinance] is intended to work as a special addition to the county's [city's] subdivision and land development regulations codified as Section 4-1 of this code. All requirements of said Code Section shall apply unless the context clearly indicates otherwise or unless this Resolution [Ordinance] conflicts with said code sections, in which case this Resolution [Ordinance] shall apply.

§8-1-7

DESIGN REQUIREMENTS RURAL CLUSTERS AND CLUSTER LOTS

§8-1-7.1

Density Clustering. The permitted residential development density for the property proposed to be subdivided, shall be used within cluster lots (see Figures), and the remainder parcel shall be utilized for agriculture or forest land or for open space. (Source: Arendt 1994.)

§8-1-7.2

Area of Lots. Cluster lots shall contain a minimum area necessary to meet health department requirements. Where permitted by the county health department, the cluster subdivision may consist of lots smaller than the sizes required for individual on-site sewage management systems (i.e., septic tanks), if adequate provisions are made for common drain fields (see Figure), subject to the approval of the local health department. No cluster lot shall be greater than two acres in size, so as to encourage the maximum amount of land possible preserved for resource use or open space.

Common Drain field

§8-1-7.3

Locations of Clusters.

- (a) In areas where usable agricultural land exists, residential development shall be clustered or sited so as to minimize disruption of existing or possible future agricultural uses.
- (b) A rural cluster subdivision may contain one or more residential clusters grouped into compact neighborhoods.
- (c) To the maximum practicable extent, existing historic rural features shall be preserved as part of the cluster development. These features include but are not limited to rock walls, fences, functional and structurally safe farm buildings, monuments, and landscape features.

- (d) Buildings shall be clustered or sited in the most accessible, least visually prominent, and most geologically stable portion or portions of the site.
- (e) Rural clusters shall be limited to locations that minimize the visual impact from adjacent lands and view corridors. Placing buildings so that vegetation, rock outcroppings, depressions in topography, or other natural features will screen them where they exist shall minimize the prominence of construction. In wooded or forested areas, the Land Use Officer may recommend and the Planning Commission may require the scattering of buildings so as to save trees and minimize visual impacts.

Rural Cluster Locations

- (f) Cluster lots shall be sited to minimize conflicts between housing and adjacent agricultural or forest zoned property.
- (g) All cluster lots should be located on the least productive soils, but they should not include environmentally sensitive areas unless no other alternative exists. If no alternative is available, encroachment into prime agricultural soils or environmentally sensitive areas shall be limited to the least amount possible.
- (h) Cluster lots should border on open space on at least one side,
- (i) and have access to any core open spaces in the rural cluster.

§8-1-8 DESIGN REQUIREMENTS FOR REMAINDER PARCELS

The cluster development shall result in the establishment of a remainder parcel comprising a minimum of 40 percent of the land area to be subdivided. Any remainder parcel shall be contiguous except in the most unusual circumstances. Any remainder parcel shall not be fragmented by public or private road easements unless no other reasonable alternative exists. To the maximum extent possible, all environmentally sensitive

areas on property proposed for subdivision shall be located within the remainder parcel. To retain the rural character, the remainder parcel should contain to the maximum extent possible forested areas, active agriculture, meadows, pastures, and prominent hillsides or ridges if they exist.

§8-1-9 OTHER DESIGN REQUIREMENTS

Subdivision identification monuments shall not be permitted unless approved by the Planning Commission, and only in such cases as the monument retains the rural or resource character of the area. This shall not be construed to prohibit landscaping at the entrance of a rural cluster subdivision.

Sight obscuring fences are not permitted within 50 feet of the public right-of-way, nor along cluster lot lines adjacent to any remainder parcel.

§8-1-10 RESOURCE LAND AND OPEN SPACE RETENTION

Active agricultural or forest land, or agricultural or forest land not presently in use, may be preserved in its current use or proposed to be made available on a lease basis in the future for compatible agricultural or forestry uses. The primary intent shall be to preserve open lands for agricultural or forest use, not to provide open space/recreational land uses which will interfere or be in conflict with agricultural or forestry operations.

The Planning Commission shall require that any such resource lands or open spaces to be preserved be shown on the preliminary and final plat as required by Section 4-1 of this code. Any areas within the subdivision which are designated on

the preliminary plat and final plat as being a common, recreation, park, open or other similar non-resource area shall be encumbered in a manner suitable to the Planning Commission to assure that such area will in some manner be beneficial to the owners of the building sites within the proposed subdivision and that said areas will not be available for development in any manner inconsistent with the intent of this Resolution [Ordinance].

to be preserved as open space may be dedicated by fee title to the County [City], subject to the approval of the Board of County Commissioners [Mayor and City Council]. If accepted in fee simple title, the county [city] or other designated public jurisdiction will maintain all open space lands accepted in fee title.

§8-1-11 RESOURCE USE MANAGEMENT PLAN

In cases where land is proposed to remain in farm or forest (i.e., resource) use, the Planning Commission shall require a farm or forest management plan for the remainder parcel to be submitted and approved prior to approval of the preliminary plat. The management plan shall describe the nature and intensity of large scale agricultural or forestry uses, permitted uses and management of the parcel so that it maintains its resource other designated functions. The management plan shall identify the responsibility for maintaining the remainder parcel. The plan shall also include any construction activities (trails, fencing, agricultural buildings) and vegetation clearing that may occur on-site. All subsequent activities must be conducted in conformance with the approved management plan.

§8-1-12 OWNERSHIP AND MANAGEMENT OF RESOURCE LAND OR OPEN SPACE

The Planning Commission may require the creation of a homeowner's association or other organization for ownership and maintenance of lands to be preserved for agriculture, forestry, and/or open space use (i.e., remainder parcels). Land

3. **American Planning Association**
Model Smart Growth Land Development Regulations
4.7 MODEL RESIDENTIAL CLUSTER DEVELOPMENT ORDINANCE
Interim PAS Report
March 2006

LandChoices

Checklist for Preserving Clean Water, Natural Areas, Wildlife and Working Farmland (www.landchoices.org)

1. Inexpensive Preliminary Sketch Plan

Include a sketch plan of greenway land, potential house sites, street alignments, and tentative lot lines, prepared according to the four-step design process for creating conservation subdivisions showing areas of proposed development and areas of proposed conservation.

This is to be prepared by a landscape architect or physical planner as the first layout document BEFORE expensive and highly detailed design drawings are created for the Preliminary Plan stage. This way any deficiencies can be corrected PRIOR to submission of the detailed, expensive Preliminary Plan.

The sketch plan is a carefully drawn rendition, done to a specific scale, and usually created as an Overlay Map to be laid on top of the underlying Existing Features/Site Analysis Map. They are always best done when done by hand, not on a computer screen.

They can be done in the field, or right afterwards, at a "mini-charrette" involving all parties concerned.

2. Conduct a Site Walk On the Property

Include all involved in the process-the developer, planning commission members, abutting landowners, officials, staff, etc.
- BEFORE any engineering plans are put into place in order to point out the conservation areas to be preserved.

Important Note: Site walks should be advertised in the usual manner as informal Work Sessions, open to the public, at which no votes or binding decisions are taken. Site walks do not add more time, as they help the process move far more quickly, since people are no longer talking and arguing about abstract lines on paper, but real slopes, actual trees, etc., which means they really understand the site conditions. There is no substitute whatsoever for seeing the land first-hand.

3. Qualified Landscape Architect and Physical Planner Experienced in Designing Conservation Subdivisions be Involved from the Beginning of the Project

This is absolutely necessary.

In the book *Envisioning Better Communities* by Randall Arendt (American Planning Association, 2010, page 21), Arendt writes, "subdivision regulations typically suffer from five fundamental flaws, resulting in flawed designs." Flaw #4: "Layouts are typically prepared by surveyors and engineers who are trained in recording site data and in street and drainage issues. They have little or no expertise in the fields of landscape architecture or neighborhood design and therefore often fail to capitalize on the significant physical, historic, and environmental features of each property."

4. Existing Features Site Analysis Map

The official time clock for review starts with the submission of this plan at the on-site walkabout or at a regularly scheduled meeting of the Planning Commission.

More Information on Methods in the First Four Steps (steps 1-4) "[Flawed Processes, Flawed Results, and a Potential Solution](#)" (PDF) (5 pages)(PDF) (5 pages)

5. Safer, Less-Wide Streets

Allow safer, less-wide streets, eliminate curb and gutters (use swales instead to absorb excess water, along with rain gardens) to lower costs, recharge groundwater, and reduce storm water runoff and pollution. Learn More at [Greener Streets: Enhancing Livability and Neighborhood Values through Greener Engineering Practices](#) (PDF)

6. Preserve a Minimum of 50%² of the BUILDABLE Land

This is in addition to the unbuildable wetlands, steep slopes and floodplains in new subdivisions.

7. Conservation Subdivision Design*

Implement Conservation Subdivisions into your ordinance
Download the following for further reference:

[LandChoices' approved conservation subdivision ordinance](#)*(doc) (61 pages) (417k) Courtesy of Walworth County, WI

[Ordinance Amendments](#) (Doc.) (2 pages)

[Conservation Subdivision Design: A Brief Overview](#) (PDF)

[Case Study: Indian Walk](#) (PDF) (2 pages)

[Case Study: West Vincent Township](#) (PDF) (2 pages)

*LandChoices does not warrant that this provision complies with your state's laws. As such you are advised to consult with an attorney that is familiar with your state's laws.

8. Conservation Subdivisions Designated as a "By-right Permitted Use" option

Designate conventional subdivision layouts as "Conditional Uses" or "Special Exemptions".

9. Create Interconnected Open Space Networks

Link together the conserved land in conservation subdivisions.

² In urban, sewerred, high density areas zoned at 2-3-4 units per acre, preserving 30-35% open space, in addition to the unbuildable wetlands, floodplains, and steep slopes, is the norm. In rural, suburban edge areas at densities of 5 and 10 acres per dwelling, where most of America's new subdivisions are being and will be built, easily 70% (or more) of the land can be preserved.