


Issue:	Water Use & Water Works	
Action Tool Title	Compact Development	
Description of the tool:	<p>Compact metropolitan development generally means that the space needs of a population can be satisfied with less land area. Compact development can take various forms, and communities can develop more compactly by using three techniques: infill development, brownfield redevelopment, and cluster development. See also Infill Development, Brownfield Redevelopment, and Cluster Development. Compact development is often described as mixed-use development, which is the practice of allowing more than one type of use in a building or set of buildings. In land use planning terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses. Source/Reference: US EPA, 2001, pp. 37.</p>	
How Well Does It Work?		
How valuable is this tool? How important is its contribution to achieving North Texas' vision for the future?		
<p>The centrality of this tool to the overall realization of many VNT objectives in natural assets conservation and managing growth cannot be belabored. It is critical in reduction of water use per capita, imperviousness & runoff, protection of wetlands, improved water quality, ag land preservation, protection of ecological habitats and many more.</p>		
What are the costs and who will they affect?	What are the benefits and who will they help?	
<ul style="list-style-type: none"> • Cost 1 discussion: A major disadvantage of mixed use development is the economies of scale. While many mixed-use development are enormous, a number of them are small and seem to have a little of everything. • Cost 2 discussion: As an owner, or as a larger tenant, it may be difficult to get the economies of scale you need in a smaller mixed-use development. 	<ul style="list-style-type: none"> • Benefit 1 discussion: The benefits for the region would be less water use per capita; therefore, less demand on our existing water supply resources, and reduced costs associated with conveying, treating and discharging wastewater. • Benefit 2 discussion: The benefits for the region would be fewer costs in maintenance and construction of water infrastructure because the development pattern would require smaller service areas for water/wastewater; therefore fewer pipes for community water/wastewater systems. Reduction in operation costs of water utility companies or special water districts would mean lower costs to the consumers. 	
What are the biggest stumbling blocks?	How can they be addressed?	
<ul style="list-style-type: none"> • Stumbling block 1 discussion: Compact development in terms of mixed use development is seen as too risky by many developers and lending institutions because economic success requires that the many different uses all remain in business. Many mixed use developments struggle to fill retail space. In addition, not all areas are ripe for this type of development. • Stumbling block 2 discussion: Many city zoning ordinances don't allow higher density, mixed-use developments. Zoning ordinances would need to be changed to allow for a mix of uses in developed areas, narrower street widths, varied yard setbacks, alternative stormwater and wastewater systems may need to be allowed to make compact, high density development a cost-effective, viable solution. 	<ul style="list-style-type: none"> • Action to address: Mixed use developments need to be designed for flexibility of function over time. In some cases developments start out as single use but are converted to mixed use as neighborhoods mature. To enable this kind of flexibility, the built fabric needs to be robust and adaptable, with the critical technical design factors being structure and services strategy. • Action to address: Local governments should advocate mixed use development to community groups, residents and business groups, as a strategy for growth management and environmental custodianship. Also, collecting and sharing best practice and investing in resources, tools and research. 	
Who Would be Responsible?		
Primary (lead) responsibility	Local governments can apply land use regulations tools such as mixed use zoning.	
Secondary responsibility	Transit institutions such as DART, local MPO (NCTCOG)	
Need for coordination	Local governments : The interconnectedness of economic activities and centers of employment in the region would require a concert of efforts by local governments to facilitate mass transit connecting activity centers in multiple jurisdictions.	

Secondary responsibility	Local governments can provide tax incentives for mixed use type of development. For instance, the State of Oregon allows cities to provide tax abatements for mixed-use projects through the Oregon Vertical Housing Development Zone program. This subsidy exempts property taxes for the entire development or for the incremental change in the property value for ten years. Tax abatements for multi-family developments also may be permitted through the Multi-Unit Property Tax Exemption program.
How Does It Connect?	
What other VNT issues are helped by this tool?	This tool is instrumental in meeting other VNT objectives such as reduction of imperviousness and thus improvement in flood water percolation. It can also help with the preservation of our farmlands and natural areas by keeping new development away from those areas that should be protected and concentrate them in already urbanized areas.
What other VNT issues could be hurt by this tool?	None at face value.
How Should It Be Implemented?	
What will be done?	When will it happen?
<ul style="list-style-type: none"> • First step for action • Following steps for action 	<p>The implementation is dependant on local government's priorities.</p> <p>Consultations between local governments and stakeholders on how best to implement this strategy would be a good starting point followed by vertical zoning/mixed use zoning in preferred areas of the city.</p>
What Examples Can We Follow?	
North Texas Case Studies	Urban Villages, Fort Worth; Southlake Town Center, City of Southlake; Firewheel Mall, Garland
Other Texas Case Studies	Mueller, Austin, TX. http://www.muelleraustin.com/
Other U.S. Case Studies	KierLand Commons, Scottsdale AZ: 530, 000 SF of mixed use, high-end building designs with a major arterial.
Supporting Research	provide summary description and links as appropriate
Related Information	http://www.scotland.gov.uk/Resource/Doc/283606/0085959.pdf
Acknowledgements	Vision North Texas Water/Natural Assets Team