

Geos Neighborhood

Arvada, Colorado, U.S.



© Cornerstone Homes

Size:

23 acres, 282 residential units

Dates:



2009 – ongoing






Project Team:

Architect: Michael Tavel Architects;
Landscape Architect: David Kahn
Studio

The Geos neighborhood is a mixed-use community revitalization project built on former industrial land. It utilizes sustainable neighborhood practices to create a people-oriented community that enhances the environment and deters sprawl.

Goals & Strategies

 Place	
Food	Goals: Goals not defined. Strategies: Edible landscaping, fruit trees. Community gardens. Central square designed to hold a farmers' market. Garden space available on residential property.
Habitat	Goals: 8.5 acres of parks and open space. Strategies: Tree-lined streets, community greens and parks. Wildlife habitat.
Transportation	Goals: Goals not defined. Strategies: Walkable communities, bike paths, pedestrian-oriented development. 1.5 parking spaces per dwelling unit.
 Water	
Water	Goals: Promote stormwater infiltration. Strategies: Stormwater management planned at all scales of the development. Permeable pavers. Stormwater retention through bioswales and parks. Surface water runoff. Water-conserving irrigation.

 Energy	
Energy	<p>Goals: Net-zero energy. 100% renewable energy produced on site.</p> <p>Strategies: Passive solar design, solar PV. District heating through ground source heat pumps. Energy-efficient design reducing energy demands by 20%. SIP construction to promote air-tight, well-insulated envelope. Insulated slab. Triple-pane windows.</p>
 Health + Happiness (Details not provided by researchers)	
 Materials	
Embodied Energy & Carbon	<p>Goals: Sustainable materials.</p> <p>Strategies: Low-emitting materials. Renewable sources for floors. Recycled ceramic tile.</p>
Waste	<p>Goals: Construction waste diversion.</p> <p>Strategies: Trash and recycling services.</p>
 Equity	
Neighborhood & Access	<p>Goals: Promote a walkable community.</p> <p>Strategies: Public access to streets, mixed-use neighborhoods. Variety of housing including cohousing, single-family and apartments.</p>
Access to Nature	<p>Goals: Goals not defined.</p> <p>Strategies: Indoor air quality monitoring and filtered ventilation.</p>
Access to Community Services	<p>Goals: Goals not defined.</p> <p>Strategies: Access to services, walkable design, walkable to amenities.</p>
 Beauty	(Details not reported by researchers)

> See next page for Performance Levels achieved

Performance Levels Achieved:

	Standard	Good	Better	Living	Regenerative
Place					
Limits to Growth					
Food					
Habitat					
Transportation					
Water					
Energy					
Health + Happiness					
Civilized Environment					
Neighborhood Design					
Biophilia					
Resilient Connections					
Materials					
Material Plan					
Embodied Energy & Carbon					
Waste					
Equity					
Neighborhood & Access					
Access to Nature					
Access to Community Services					
Investment					
Beauty					
Beauty & Spirit	Not specified				
Inspiration					

Sources:

<http://discovergeos.com>

<http://www.discovergeos.com/GEOS-DesignBook.pdf>

<https://www.asla.org/sustainablelandscapes/geos.html>

**Note: This case study was developed using found information.*

21st Century Development is a model for the creation of regenerative communities that strives to provide a healthy environment for all people and living systems now and in a dynamic future.

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