GETTING CONNECTED
Improving Access to Opportunity in your Community
STREET NETWORKS ENDURE!
GET THE MOST PERMANENT FEATURES RIGHT!
OVERVIEW

» What is street connectivity
» Why it matters
» Utah Street Connectivity Study

Source: CNU
WHAT IS STREET CONNECTIVITY?
What is Street Connectivity

Hierarchical vs. Connected
THRU VERSUS SLOW AND LOCAL STREETS
WHY IMPROVE CONNECTIVITY?
STREET CONNECTIVITY IMPROVES ACCESS TO OPPORTUNITY

» Access more within a travel distance
The street network matters

Hierarchical vs. Connected
• Walk/bike distances longer

• Traffic congestion rougher

• Arterial character meaner

• Access to opportunity worse...r
• Walk/bike distances shorter
• Traffic congestion smoother
• Arterial character friendlier
• Access to opportunity better
Case Study: Merced, CA
Merced Alternative’s advantages:

- Fewer Vehicle Trips: 20% lower
- Shorter Driving Distances: 30% lower
- Fewer busy streets: 30% fewer streets above 30,000 average daily trips
WHAT ABOUT THE CHILDREN?!

• 18% of children are obese
WHY IMPROVE CONNECTIVITY?

Connected streets led to more walking / bicycling

88% of students in Daybreak walk to school

17% Of students in similar, less walkable neighborhoods walk to school

Utah Street Connectivity Guide

- The Case for Connectivity
- Tools for Connectivity
- Design Guide and Case Studies
Utah Street Connectivity Guide

**WHY is connectivity important?**

A highly-connected street network—one where a dense set of intersections each connect to several streets, that connects a community to its key destinations, and is walkable—provides a multitude of benefits for Utah communities.

**Regional and community mobility**

Good street connectivity redistributes traffic among different routes in a network, providing more options and better accessibility for local traffic. This in turn frees some of the capacity on the adjacent arterial roads, which are mostly used by the non-local traffic.

**Transportation choice**

Higher street connectivity provides travelers with greater choice of travel modes. In a well-connected network, active transportation modes and transit become more viable choices. This means that these types of networks are less automobile-dependent.

**Safety**

In recent years, many studies have focused on how built environment factors (such as street connectivity and community) affect physical activity and health.

**Infrastructure and growth management**

Higher street connectivity improves the investment in municipal infrastructure, such as utilities, and services, such as fire and emergency services.

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**WHAT is connectivity?**

Street connectivity is a simple idea—providing a network of public streets whose intersections allow for easy movement around it. However, this simple idea is more difficult to define.

Look at the two images below. The images show two street networks, and they are clearly different. But why are they different?

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**Connectivity Improves Mobility**

Within this guide's case studies, each 1 mile of roadways in 1 lane mile of roadway is estimated to provide 1 year of benefits in travel time.

**Connectivity Creates Transportation Choice**

High intersection density is the best predictor for use of active transportation.

**Connectivity Improves Emergency Services**

Adding 300 feet of roadway between two branches is critical to an efficient and reliable emergency response service area by 10 percent.

**Connectivity Improves Safety**

The highest fatal injury rate is found in low-income neighborhoods.

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**The relative level of connection**

The most basic aspect of street connectivity is the degree to which streets are connected to one another at each intersection. In the example below, the Downtown Salt Lake City grid has a higher level of connection because of its consistency of 4-way intersections, while the eastern Salt Lake City example has mostly 5-way intersections and cul-de-sacs.

**Network density**

To consider network density, take the very connected network in downtown Salt Lake City and compare it to Salt Lake City’s Avenues neighborhood. Because both are nearly perfect grids, they have the same relative level of connection. However, the network in the Avenues is noticeably different, and more connected. This is due to their network density. With its 330-foot blocks, the Avenues has much higher network density than Salt Lake City, with its 800-foot blocks.

**Ability to connect to specific destinations**

This aspect addresses the problem that all destinations along a network are not equally popular—and, therefore, are not equally valuable for a network to connect to. An elementary school receives more trips along a network than a single family home, for example. So it is important to understand how well a given network connects the community to these specific points along it. Often improving access to key destinations such as schools is the most effective way to a built-out community can improve its connectivity.

**Quality of the network for all users—walkability**

Each street offers a different environment for all the transportation modes—private vehicles, public transit, freight, bicycling, and walking. Among these, it is particularly important to pay attention to the conditions for walking. Pedestrians are the most vulnerable users of the network, and everyone is a pedestrian at some point during their trip. The pedestrian environment is critical for transit access. A well-connected street provides infrastructure for walking—is a key aspect of street connectivity.

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**Utah Street Connectivity Guide**
One size does NOT fit all

This guide defines six types of neighborhoods/districts:

**Urban residential neighborhood:** An urban residential neighborhood is a high-density residential area with a mix of civic, commercial, and office uses.

**Downtown district:** A mixed-use center of activity that attracts people from throughout the community and sometimes the region.

**Suburban residential neighborhood:** A lower-density residential area with other types of uses typically found on nearby arterial or collector corridors.

**Campus district:** A large land use such as an educational campus, shopping center, business park, or entertainment/lifestyle center.

**Rural residential neighborhood:** A very low density residential area with agricultural or natural space and few other uses present.

**Industrial district:** An area focused on production or distribution activities.

Neighborhood and district-scale connectivity considers all streets.

*Utah Street Connectivity Guide 35*
Case Studies

LAYTON: EXISTING CONNECTIVITY

LAYTON: CONNECTIVITY IMPROVEMENTS

BENEFITS
HOW TO IMPROVE CONNECTIVITY?

» Assess your city
» Planning and ordinances
» Street & development standards
» Retrofit tools
GET CONNECTED!

» Connectivity provides multiple benefits
  » Access to opportunities
  » Walkability
  » Reduce traffic congestion
  » Reduces the burden on municipal services
  » Neighborhood long-term value and stability

» One size doesn’t fit all: explore what works in your community

» The Utah Street Connectivity Guide can help
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GETTING CONNECTED
Improving Access to Opportunity in your Community
ACROSS THE STATE, PEOPLE WANT TO....

70% walk more
58% bike more
46% take transit more

Source: Utah Statewide Household Travel Survey
PROGRAM GOALS

Mission: TLC supports local governments in their planning efforts, implementing the Wasatch Choice Vision.

Goals:

- Maximize the value of investment in public infrastructure.
- Enhance access to opportunity.
- Increase travel options to optimize mobility.
- Create communities with opportunities to live, work, and play.
2018 AWARDS

• $904,922 TLC Funds
• $281,525 Local Match
• Nearly $1.3 Million in Total Project Funding

• 13 awards
  • 7 Salt Lake Urbanized Area
  • 5 Ogden/Layton Urbanized Area
  • 1 Tooele County
• 3 multi-jurisdictional
# 2018 AWARDS

## Ogden/Layton Urbanized Area
- Ogden Railyard Master Plan Study
- Plain City Transportation and Trails Master Plan
- Roy General Plan and Ordinance Update
- South Davis (North Salt Lake, Centerville, Bountiful) Active Transportation Plan
- Woods Cross Station Area Plan

## Tooele County
- Grantsville City General Plan Update

## Salt Lake Urbanized Area
- Holladay Canal Trails Study
- Salt Lake County + Jordan River Commission Blueprint Jordan Plan Update
- Millcreek Town Center Plan
- Salt Lake City Street Typology Plan
- South Jordan + West Jordan Active Transportation Plan (Phase 2)
- West Jordan Center Station Area Plan
- West Valley Active Transportation Plan
CITY WIDE PROJECTS

• Salt Lake City Street Typologies Plan
  • $120,000 Budget

• Roy City General Plan and Ordinance Update
  • $130,000 Budget

• Grantsville City General Plan Update
  • $72,000 Budget
CENTRAL PLANS

• Millcreek Town Center Plan
  • $70,000 Budget

• West Jordan Center Station Area Plan
  • $100,000 Budget

• Woods Cross Station Area Plan
  • $85,000 Budget

• Ogden Railyard Master Plan Study
  • $30,000 Budget
ACTIVE TRANSPORTATION & TRAILS PLANS

• South Jordan + West Jordan Active Transportation Plan
  • $97,447 Budget

• Holladay Canal Trails Study
  • $75,000 Budget

• West Valley Active Transportation Plan
  • $100,000 Budget

• Plain City Transportation and Trails Master Plan
  • $15,000 + TLC Technical Assistance

• South Davis (North Salt Lake, Centerville, Bountiful) Active Transportation Plan
  • $112,000 Budget
REGION-WIDE PLAN

• Salt Lake County + Jordan River Commission
  Blueprint Jordan River Plan Update
  • $180,000 Budget
• Working together to further “establish Davis County as a recreation destination and promote economic development and tourism”

• Implementation focused: maintenance schedule, facility design, funding sources, working with UDOT and other stakeholders
Objectives include:

- Increase Connectivity & Mobility
- Provide Alternative Transportation
- Reduce Emissions
- Promote Health
- Enhance Personal and Public Safety
- Support Smart Growth

Working closely with stakeholders
TLC Program

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Core Routes Study

• Purpose
  • Evaluate, analyze, and provide more definition to the service and capital investment characteristics of “Enhanced Bus” transit service
    • Connectivity (n-s, e-w direct service)
    • Frequency
    • Span of service
    • Traffic signal coordination
    • Capital improvements (i.e. station enhancements, sidewalk connectivity, etc.)
Core Routes Study

• Purpose
  • Evaluate, analyze, and provide more definition to the service and capital investment characteristics of “Enhanced Bus” transit service
  • Define a robust, efficient, high quality bus network that compliments existing rail service
    • Pivot off and build upon Regional Transportation Plans
Core Routes Study

• Goals
  • Identify an efficient, reliable, and easily understandable bus system
  • Build consensus around this concept
  • Create a clear plan of action to implement Core Route system as funds become available
Core Routes Study

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  • Create a clear plan of action to implement Core Route system as funds become available
THANK YOU
Golden Spoke Rides and Event

- June 2, 2018
- Event to Celebrate
- Ogden to Provo
- 100+ Miles
- Separated, Safe, Multi-use Trail network
- Final Bridge at North Temple
Golden Spoke Logo