INTRODUCTION

For the City of Thornton to achieve its revitalization goals for the Thornton Urban Center (TUC), and for this area to truly become the “Heart of Thornton” for local residents and an attractive regional destination that draws employers and visitors from throughout Denver metro, it will be necessary to completely rethink the transportation system for the area. This rethink will require a shift towards prioritized planning and funding transportation projects, as summarized below:

• **Emphasize multimodal improvements (transit, bicycling, and walking).** The current transportation infrastructure of the Thornton Urban Center is primarily auto-oriented. Going forward, the City must prioritize a broad array of multimodal improvements in the TUC, ranging from legally-required improvements that must be done immediately (e.g. making all intersections ADA compliant with curb ramps), to relatively low-cost “low-hanging fruit” improvements (e.g. closing gaps in the sidewalk network, crosswalk improvements), to longer-term “bigger picture” improvements that require planning and funding strategies to be developed now (e.g. improvements to transit service and curbside shelters).

• **Continue to transform TUC streets into authentic places where people want to be.** The design and function of TUC streets generally fails to accommodate bicyclists and pedestrians elegantly. Investments in streetscapes that improve traffic circulation for all modes, reduce collisions and improve amenities (especially for pedestrians and bicyclists, the most vulnerable roadway users), and create great streets that function not as speedways that people use to drive through the TUC on their way to somewhere else, but as public spaces that are considered part of the City’s cherished open space system along with parks and trails. An example of this type of project would be to transform Washington St. into a true multi-way boulevard, as many other cities have done when there is no additional right-of-way available to widen their traffic-congested arterials. See images and an illustration of a multi-way boulevard on the following page.

• **Create a low-traffic, low-carbon, and financially sustainable transportation network.** Designated Urban Centers must help achieve DRCOG regional targets for reduced ‘vehicle miles traveled’ (VMT) and greenhouse gas emissions (GHGe). As a result, the TUC’s transportation policies and investments should lead to a meaningful reduction in auto trips and associated greenhouse gas emissions. Examples include reforming off-street parking requirements to reduce barriers to redevelopment (e.g. eliminating minimums, creating maximums, encouraging shared parking) and creating a
Transportation Management Organization to focus on policies and programs that will provide alternatives to driving (e.g. a branded shuttle circulator, subsidized EcoPasses for RTD transit, etc). This will not only improve the environmental sustainability of the TUC’s transportation network, but also the financial sustainability as well: since spending money to reduce vehicle trips is more cost-effective than spending money for roadway expansions that attempt to accommodate those vehicle trips.

Fortunately, the aforementioned strategies are aligned with and fully supported by the City’s existing adopted transportation policies and plans, including the 2009 Transportation Plan and the 2011 Complete Streets Policy.

So the key next step for the City of Thornton is not how to create a supportive policy framework – such a framework already exists – but instead how to implement it and shift transportation planning and funding in the TUC to prioritize projects that align with those policies, in order to move from policymaking to actual implementation. To that end, this chapter describes the mobility recommendations for the TUC that will help implement the City’s existing multimodal policies, achieve the City’s goals for revitalization and redevelopment of the area, and achieve DRCOG’s regional goals for all designated Urban Centers to contribute to reduced VMT and GHGe.

Example: Multi-way boulevard

Existing: Washington St. condition south of 95th Ave. (source: Gene Putman)

Every trip—whether by transit, automobile or by bike—begins and ends as a pedestrian. To begin reorienting the Study Area toward the pedestrian, the strategies listed below create a more inviting pedestrian realm and bridge the super blocks in the interior of the Study Area and the perimeter arterial streets, like Washington St. and 88th Ave.

- Address gaps in the sidewalk network and develop an ADA Transition Plan to ensure conformity with federal requirements for fully accessible public rights-of-way.
- Pedestrian Improvements to complete the existing sidewalk / trail network:
  - New sidewalks:
  - South side of Thornton Parkway, between I-25 and Grant St.
  - South side of Russell Blvd., west of Pearl St.
  - North and south sides of 86th Ave., between Washington St. and Pearl St.
  - North side of 84th Ave., between I-25 and Grant St.
  - Connect segments of Niver Creek Trail through the North Valley Technical Center.
  - Promote walking within and to and from the Study Area with streetscape improvements, including street trees, a landscape buffer between the sidewalk and travel way, pedestrian-scaled lighting, benches, wayfinding signage, etc., along the following streets:
    - Grant St.
    - Pearl St. between Eppinger Blvd. and 86th Ave.
    - Washington St.
    - Eppinger Blvd. between Grant St. and Washington St.
    - Russell Blvd. between Grant St. and Corona St.
    - 88th Ave. between Grant St. and Corona St.
    - 86th Ave. between Grant St. and Pearl St.
    - 84th Ave. between I-25 and Washington St.
  - Install intersection improvements, including high-visibility crosswalks and ADA accessible curb ramps, at a minimum, to provide protected pedestrian crossings and alert motorists of the potential for pedestrian crossings at the following locations:
    - Grant St. and Russell Blvd.
    - Grant St. and 84th Ave.
    - Pearl St. and Eppinger Blvd.
    - Pearl St. and Russell Blvd.
    - Pearl St. and 88th Ave.
    - Pearl St. and 84th Ave., with a new intersection.
    - Washington St. and Eppinger Blvd.
    - Washington St. and 86th Ave.
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As the area develops and land use intensifies, work with developers to improve intersections along Washington St. and 88th Ave. (which historically experience the highest incidence of pedestrian and bicycle collisions) and at Grant St. and Eppinger Blvd.:

- Consider curb extensions to shorten the pedestrian crossing distance and increase visibility.
- Consolidate striped buffer to build a raised median refuge on Washington St. to allow pedestrians to consider one direction of traffic at a time when crossing Washington St.
- Install high visibility crosswalks and ADA accessible curb ramps.
- Provide accessible pedestrian countdown signals.
- Improve transit shelters and the sidewalk width around transit stops.
- Increase sidewalk width at transit stops.

Provide physical gateways identifying and branding the TUC Area, in addition to previously described intersection improvements, at the following locations:

- I-25 and Thornton Pkwy.
- Thornton Pkwy. and Grant St.
- Thornton Pkwy. and Washington St.
- 88th Ave. and Washington St. - this is a major intersection that provides a logical gateway location and transition from Original Thornton to the to-be-branded area to the west of Washington St.
- 84th Ave. and Washington St.

Establish a Safe Routes to School program focused within and near the Study Area to improve safety, access, and amenities for school-age children walking to school.
Map 3-1: Proposed Pedestrian & Intersection Improvements
BICYCLE LANES / ROUTES / MULTI USE TRAILS

Bicycling is an underutilized mode in the TUC for a number of reasons, but primarily due to the lack of safe bicycling facilities. The strategies identified in this section build off of the City’s already robust multi-use trail network and planned bike network, including the recent striping of the first bike lanes in the TUC on 88th Ave.

- Restripe overly wide curb-to-curb dimensions on low-traffic, collector and local streets to include 5’-wide (minimum) bike lanes in both directions:
  - Eppinger Blvd.
  - Russell Blvd.
  - 86th Ave.
  - Pearl St.

Please see pages 3.8 and 3.9 for illustrations depicting the road diet / addition of bike lanes.

- Stripe 5’-wide bike lanes or shared lane markings (sharrows) on Corona St., as right-of-way allows.

- Identify Grant St. as a preferred bike route.

- Post a bicycle route east of the terminus of the bike lanes along 88th Ave. at Pearl St.

- Connect the Niver Creek Trail to 84th Ave., across 84th Ave., and through the North Valley Technical Center site. This may include a multi-use path paralleling a portion of 84th Ave.

- Build a multi-use trail connecting the proposed bike lanes on Pearl St. to the Niver Creek Trail.

- Utilize underdeveloped right-of-way along the east side of Washington St. between Thornton Pkwy. and Eppinger Blvd. for a multi-use trail.

- Consider private-public partnership to pilot a bike-sharing program with hubs at transit nodes and major employers.

- Provide ample, secure and well-placed bicycle parking facilities.
Map 3-2: Proposed Bike Improvements
The following graphics, created by Gene Putman, the City’s transportation and emergency management manager, show how existing streets could be reconfigured to include on-street bicycle lanes or off-street multi-use trails.

Example: Eppinger Blvd. west of Pearl St.

Example: Russell Blvd. west of Pearl
Example: Pearl St. south of Eppinger Blvd.

Example: Grant St. south of Eppinger Blvd.
A significant transit ridership base already exists for trips to and from the TUC. Strategies to improve transit service to and through the Study Area include:

- Provide a new east-west fixed-route transit service along Thornton Pkwy.
- Extend transit north of Eppinger Blvd. on Washington St.
- Move the existing route 80 from Washington St. to Grant St. between 88th Ave. and 84th Ave.
- Consider adding bus and carpool “kiss-n-ride” dropoffs along 88th Ave., or within the planned Park-n-Ride expansion, in a manner that minimizes walking distances, takes advantage of site lines, and keeps various modes in proximity to each other while preventing multimodal conflict. The current Park-n-Ride has 817 spaces, and a planned expansion to the existing lot east of I-25 would add 200 spaces, as well as a route 201x on I-25 HOV / HOT lanes (construction scheduled to begin Fall 2013 and be complete by Spring 2014).
- Consult with the CDOT and RTD to provide adequate transit lane widths and increase the width of transit boarding platforms. Provide attractive streetscaping for transit stops and lay-by locations to ensure the comfort of transit riders.

- Consider a branded circulator shuttle serving the Park-n-Ride, North Valley Technical Center, Thornton Shopping Mall site, Grant St., and Washington St. The shuttle will help supplement existing fixed-route transit and dial-a-ride (or fixed area) services, create a “mobile billboard” to help create a unique identity for the district in support of initial redevelopment, and provide additional “eyes on the street” to address quality of life issues. The shuttle should be supported by existing and new development in the Study Area as well as the City and / or external funding sources such as regional, state, or federal grants.
Map 3-3: Proposed Transit Improvements
Without improving automobile parking and traffic issues in the TUC, the City will not be able to achieve its revitalization goals for the area. The recommendations below summarize how those conditions can best be improved, while supporting all modes.

**Parking**

- Reform off-street parking requirements to remove barriers to new development and expansions / changes of use in existing development, including:
  - Reduction or elimination of parking minimums for low-traffic, transit-oriented development.
  - Institution of parking maximums for stand-alone parking, with higher parking maximums for shared parking.
  - Allowing projects to meet parking demand in shared facilities and / or nearby off-site locations.
- Facilitation of shared parking arrangements among owners of existing underutilized parking lots to support the creation of a “park once” district.

**Circulation**

Currently, the TUC faces a dilemma in managing its automobile circulation network. This is because some streets (e.g. Grant) have excessive right-of-way that contributes to speeding and collisions while other streets (e.g. Washington) have high traffic volumes but no additional right-of-way to expand. Exacerbating this dilemma, the City’s 2009 Transportation Plan identifies over $500 million of transportation capital expenditures citywide, primarily for roadway expansion projects, but with no real projected improvement to traffic congestion on streets in the TUC (comparing current and future peak-hour Level of Service).

Key circulation recommendations include:

- Implement road diets on low-volume streets to reduce speeding and collisions and allow for implementation of bike facilities and traffic calming pedestrian improvements. In general, north-south collectors and local streets with excess right-of-way (relative to current and future traffic volumes) are good candidates for reduction in the number of lanes and/or reduction in the width of existing lanes. Major arterials are generally not good candidates for reduction in the number of lanes, however reduction of lane widths on some of these arterials may be necessary to create adequate right-of-way for bike lanes and/or widened sidewalks and would assist in traffic calming by reducing vehicle speeds and collisions.
- Bring consistency to 88th Ave. and Grant St. where, for example, the 10’ travel lanes funnel to 16.5’ and then back to 10.’
- Revise street design standards for this area to allow for greater flexibility in lane dimensions and right-of-way allocation in accordance with regional and local best practices.

Washington St. forms the eastern boundary of the Study Area and represents a significant barrier between the Original Thornton neighborhood and the greater TUC Area. Washington St. carries a large number of vehicles including occasionally serving as an alternate route to I-25 when there are incidents or severe congestion on the I-25 corridor. In recent years, Washington St. has been among the streets in the Study Area with the highest concentration of crashes involving bicyclists and pedestrians. The potential for redevelopment, especially at the Thornton Shopping Mall site, provides a significant opportunity to reevaluate the way Washington St. serves Thornton. Potential improvements include:

Existing: Washington St. west of Thornton Shopping Mall
• Consider a multi-way boulevard on Washington St. or a portion of Washington St, as right-of-way allows, without necessarily reducing the number of through lanes or the throughput capacity for autos.

• Improve throughput and travel times from reduced turning movements between Washington St. and the mall site by building a multi-way boulevard to provide frontage roads with better local access.

• Consider providing additional parking on frontage lanes by changing parking configurations, e.g. converting parallel parking to angle parking.

• Increase the width of the amenity zone within the pedestrian realm and provide attractive streetscaping to enhance the aesthetic quality of the street.

• Per the Comprehensive Plan, create a culture trail along 88th Ave. and Washington St., establish a parkway treatment along Washington St., and improve the intersection of Washington St. and Thornton Pkwy.
Supportive Traffic Management Policies

In addition to the recommendations discussed previously, the following policies will help enable multimodal accessibility within the TUC:

- Consider revising on-street parking design standards to encourage on-street parking on roads with excess vehicle capacity (LOS C and above).
- Revise transportation performance measures for the Study Area to include multimodal Quality of Service / Level of Service considerations, rather than sole reliance on vehicle level of service.
- Work with the existing Smart Commute Metro North Transportation Management Organization to focus on policies and programs that will provide alternatives to driving, e.g. the branded shuttle circulator and subsidized EcoPass for RTD transit.
- Transportation Demand Management Improvements - Request that new developments initiate transportation management programs to mitigate their traffic impacts.
  - Parking pricing / user fees for new development (where feasible via a direct charge, unbundling or cash-out parking mechanisms).
  - Shared parking arrangements for existing and new development.
  - Subsidized transit passes for employees and residents of new developments (EcoPass program).
  - Provide financial incentives for employees of new developments to walk, bike, carpool, vanpool, or take transit to work.