NIWOT TRANSPORTATION & CONNECTIVITY PLAN FINAL 15 February 2012







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NIWOT TRANSPORTATION AND CONNECTIVITY PLAN

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1. EXECUTIVE SUMMARY

The Niwot Local Improvement District, business community and neighborhood representatives worked with Boulder County to prepare this plan. This plan combines multi-modal transportation and parking concepts into a single document with short, near, and long term solutions.

Vision, Principles, & Policies

The vision reflects the community that stakeholders desire to become in the future. Extensive effort was made during this process to work with the community to prepare this plan.

Strategic Implementation Plan

The Strategic Implementation Plan includes a summary of key projects, programs, regulations, partnerships, actions and strategies. They are intended to guide decisions after adoption of this Plan to strategically implement projects.







2. VISION, PRINCIPLES, & POLICIES

The Niwot community, in conjunction with Boulder County, initiated the Niwot Transportation and Connectivity Plan (the *Plan*) to create a coordinated plan for infrastructure improvements around Niwot. The goals of the *Plan* are to provide recommendations and preliminary designs for projects that will improve local and regional mobility and access while retaining the special character of the Niwot community.

The *Plan* is based of the following multi-modal transportation visions, principles, and policies:

- Provide transit, pedestrian, bicycle, trail, and motor vehicle connections in developments to link residential and employment areas, commercial centers, recreational and open space areas, and educational facilities
- Expand the bikeway and pedestrian network to provide safe, appealing, and convenient connections for travel and recreation
- Develop parking management policies for public and private facilities that encourage the use of alternative modes
- Develop a network of pedestrian and bicycle pathways that serve the resident's needs to safely and efficiently move between activity areas and living areas within the Niwot Community

The *Plan* was a collaborative effort to prepare a timeline for implementing projects in the short term (2012-2013), near term (2013-2015), and long term (beyond 2015). Conceptual projects were based on input from the project stakeholders and the following:

Inventory of vehicle travel, parking, transit, bicycle, and pedestrian conditions Evaluation of travel patterns for all modes Identification of potential bicycle-pedestrian connections Identification of safety improvements along Niwot Road Evaluation of parking conditions and strategies to improve the utilization of existing parking supply



3. NIWOT COMMUNITY OVERVIEW

The Town of Niwot is located just east of Colorado Highway 119, also known as the Diagonal Highway. Niwot is an unincorporated community with a population of approximately 4,000. Named after Chief Niwot, Niwot means "Left Hand," in the Arapaho language.

The town thrived when the Colorado Central Railroad extended its tracks from Boulder in 1873, and Niwot subsequently developed around the railroad, with the business district to the west of the tracks and neighborhood streets to the east. The business district eventually moved to 2nd Avenue where local shops, restaurants, and the oldest operating Grange in Colorado now make up the Niwot Historic District.

As the location for local businesses and events, Old Town is the heart of activity and community identity in Niwot. The Niwot Road corridor serves as the main route from Highway 119 and through town. As access and mobility are priorities in these areas, Old Town and Niwot Road are the main focus of the Niwot Transportation and Connectivity Plan.

The *Plan* was initiated by the Boulder County Transportation Department after several transportation and mobility needs were identified by the Niwot community. Parking concerns, pedestrian connectivity and access, and Niwot road safety were the main issues voiced by several community groups.



Antique store in Old Town



4. COMMUNITY INPUT SUMMARY

The Niwot Transportation and Connectivity Plan began with a baseline analysis of the community's infrastructure, policies, and travel patterns for all modes. Public engagement and stakeholder involvement throughout the process shaped the *Plan*'s short term solutions and longer term goals for transportation and connectivity in Niwot.

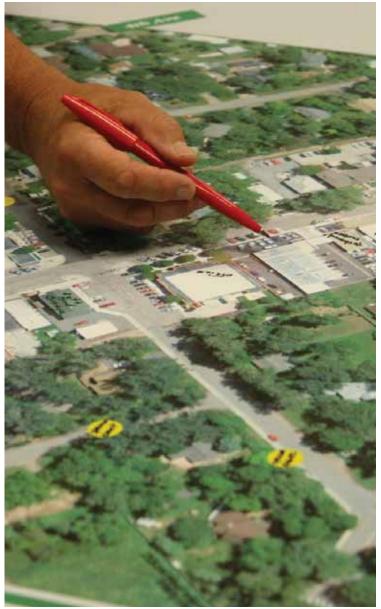
Stakeholder Kick-Off Meeting

The Niwot Transportation and Connectivity Plan began with a Stakeholder Kick-Off meeting on July 21st 2011. The consulting team facilitated as County Staff and Niwot Community Representatives came together to define preferred directions for the plan.

Keypad polling shaped conversations about project opportunities and constraints. This "Project Outcome" session identified the following challenges in the planning process:

- Diverse expectations and priorities
- Policy framework conflicting with vision for future
- Local goals vs. County goals
- Private vs. public space
- Controversy surrounding parking

After the outcome session, the stakeholders divided into three round-table groups to identify specific issues and priority areas on aerial maps. Each rountable group reported back to the larger group to compile issues related to Old Town, Niwot Road, parking, pedestrian access, and trail connections. A summary of identified issues and opportunities is included on the following page. Based on these issues and opportunities, a list of 23 potential projects was compiled for improvements throughout the Niwot community.







Issues and Opportunities

Identified during July 21st Stakeholder Meeting

Old Town

Parking full along at 2nd Avenue during peak hours Parking overspill into residential areas Traffic calming at 2nd Avenue & Niwot Road Traffic calming along Murray Street Use vacant property for parking Directional signage leading to Old Town Pedestrian crossing along Franklin Street

Niwot Road

Connections to Park & Ride Crossing at 2nd Avenue Connection to Cottonwood Square Speeding to/from Diagonal Highway Speeding between 83rd Street & 95th Street Traffic control into high school On-street parking across from Niwot Market Signage into high school Signage leading to Old Town Continuous sidewalks on both sides of the street

Trail Connectivity

Between Cottonwood Square & residences South side of Niwot Road More direct connection from Centerbridge Drive to Old Town To Park-and-Ride Between Greenwood Place & Centerbridge Drive

Parking

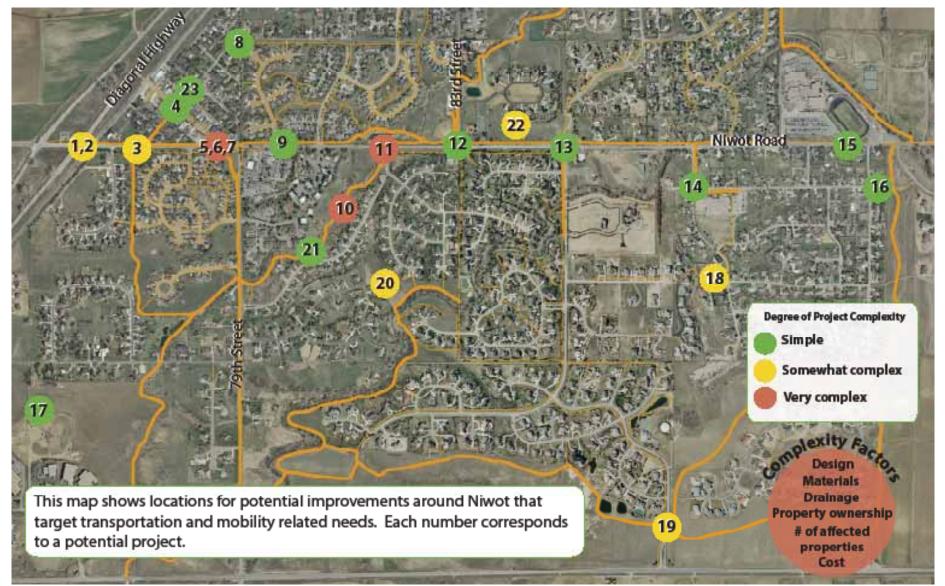
Use vacant lot adjacent to commercial area specifically for parking Shared parking Enforcement Expand Park-and-Ride Increase distance required between businesses and parking Incentives for employees to use alternative modes Expansion of parking within commercial district Pay for parking

Pedestrian Crossings

79th Street & Niwot Road 83rd Street & Niwot Road Longview Drive & Niwot Road 2nd Avenue & Niwot Road Crosswalk west of Franklin Street In front of gas station on Niwot Road To Niwot Elementary School Sidewalk on south side of Niwot from Longview to High School West side of 79th Street by Cottonwood Square Along Franklin Street in Old Town



Project Location Map





NIWOT TRANSPORTATION AND CONNECTIVITY PLAN

Project Website www.niwotmoves.com

The project website served as an avenue to inform the community about project updates and upcoming meetings. The website also solicited feedback from Niwot residents and business owners through comment boxes and an online survey.

Community Workshop #1

The first community workshop was held on October 13, 2011 to prioritize the 23 projects as short term, near term and long term priorities. Based on stakeholder insights, the consulting team performed field investigations to identify potential projects to improve bicycle and pedestrian connections throughout the community and increase safety along Niwot Road. Projects were categorized by their level of complexity - based on cost, design, materials, and property ownership. After viewing the project posters and discussing with the project team, workshop attendees indicated their preferred improvements by placing dots on posters of their most desired projects.

Community Workshop #2

The second workshop was held on October 26, 2011 to review input from the first community workshop. Attendees reviewed a preliminary "short list" of action items for mobility improvements in Niwot. All Niwot residents, neighbors, and business owners were encouraged to review the draft plan and provide comments. The feedback recieved informed the strategic implementation plan on the following pages.



Over 250 comments were received during the course of this plan. Community input determined which of the 23 projects are considered as the top three "Priority Projects," ranging in levels of complexity.

Website Comments Received	55
On-line Surveys Completed	82
Comments from Public Meeting	57
Comments from Stakeholders	78

272





Total

5. STRATEGIC IMPLEMENTATION PLAN

The following section recommends projects that will achieve the transportation vision established by Niwot Local Improvement District and Boulder County during this planning process. The projects are based on the input from the public, Niwot Local Improvement District, neighborhood stakeholders, and the technical assistance of Boulder County staff. Each of the projects has been evaluated for their relative ease of implementation and documented using a "complexity meter" icon as shown on page 6.

Based on input from project stakeholders and the public, several potential projects were divided into different parts or phases. These parts were renamed with letters (i.e. 3A & 3B) in order to maintain consistency in project numbering. The Plan includes the Priority Projects from the public process as well as several quick and relatively inexpensive components from amongst the proposed projects.

Project Funding

Boulder County and the Niwot Local Improvement District (LID) will identify a variety of funding sources to construct the Priority Projects and the "quick and easy" projects destribed in the implementation section of this plan. Additional projects identified in this document will be considered in the future as funding is available.

The following is a list of "quick", "easy" and/or "inexpensive" projects, or project components, regardless of project ranking. These projects, some "stand alone," some part of a larger project, are relatively inexpensive. They will not require any new right-of-way and could be implemented relatively quickly.

Component of Project 1: Improved pedestrian connection to Park-and-Ride by replace/relocate missing sign by pedestrian push button.

All of Project 4: Improve pedestrian crossings at Franklin Street & 2nd Avenue by installing marked crosswalks and stop bars, and relocate/consolidate newspaper kiosks.

All of Project 8: Complete sidewalk connection at 5th Avenue & Neva Road by installing 40 feet of missing sidewalk.

Component of Project 12A: Enhance pedestrian crossing of Niwot Road at 83rd Street by installing "back to back" pedestrian crossing signs on two existing posts.

Component of Project 13A: Create pedestrian crossing of Niwot Road at Longview Drive by installing a new marked crosswalk, two new "back to back" pedestrian crossing signs at the new pedestrian crosswalk and 75 feet of new 8' wide sidewalk.

Component of Project 14A: Improve pedestrian access to Niwot Elementary School by triming overhanging vegetation near all school signs and installing "back to back" school crossing signs on 2 existing posts on Walker Avenue.

Project 21: Improve gravel trail connection between Centerbridge Drive and Loop Trail by installing 25 feet of gravel surface on existing dirt trail.



Component of Project 23: Improve pedestrian facilities at Franklin Street & 3rd Avenue by installing marked crosswalks on the southwest and southeast legs of the intersection and installing paved or gravel landing between crosswalks on the southeast corner of the intersection.

Component of Project 24: Pedestrian improvements at Niwot Road & Niwot Square Road intersection by installing signed and marked pedestrian crossing across Niwot Square Road where the existing path crosses the street.





February 2012

The following priority projects are based on over 250 comments received during the course of this plan. The following projects received the highest priority for implementation. The projects are 3A&B, 5, 6A&B, 9A&B, and 22. A set of preliminary construction drawings and planning level cost estimates have been prepared for each of these projects. In upcoming years, the Niwot LID and Boulder County will identify funding to implement these projects. The additional projects in this document will be reconsidered and reprioritized in the future to reflect updated opportunities within the Niwot community.





Priority Projects



3A

- Install "back to back" protestal an signals at crosswalls.
- This overlanging vegetation
- Install slop ber und crossweik en Annklin at Niept Roed.



- Realign Ranklin and Nixot Road Intersection
- Construct sidewalk on south side of Hand Hand
 Lectures crosswalls

3B

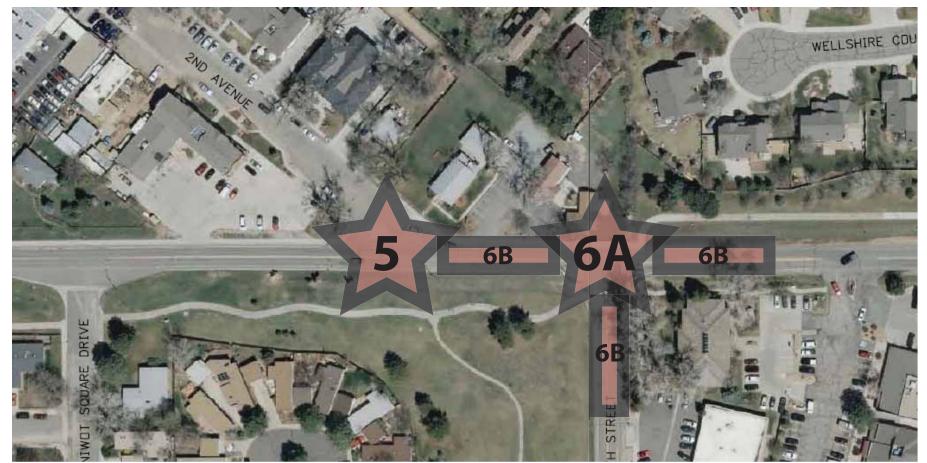
 Install path connection from Manot Road to Whittee Stop Park (concinute with property conners)

22

Speed miligation storng Minut Road



Priority Projects



5

- Realign 2nd Ave and Niwot Road intersection
- Install two new marked and signed pedestrian
 crossings on Niwot Road
- Install two new sidewalk connections in park on south side of Niwot Road



6A

- Consider all-way stop at Niwot Road and 2nd intersection
- Add new crosswalk and sidewalk connection at
- Niwot Road and 79th Street intersection
- **6B**
 - Reconstruct roadway with specialty pavement in the future if funding is available

22

•

Speed mitigation along Niwot Road





Priority Projects



Project 9A, 9B, & 22

9A

- install has new skiewalk connections on parth skie o'Next Red
- install second marked and signed crosswalk Install "Incluid back" pedesbian crossing signs



9B

-

Work with property concerces south side to extend sidenality to existing businesses

22 -

Speech militigation along Hisrat Road

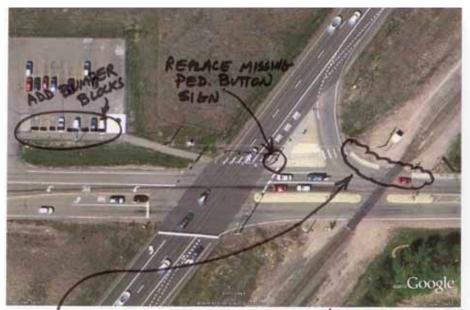
Project 1 – Improved pedestrian connection to Park-and-Ride



In order to access the Park-and-Ride from Niwot, pedestrians must cross the railroad tracks and northbound lanes of the Diagonal Highway. Pedestrian facilities currently consist of irregular sidewalks and crosswalk striping. A sign is missing to indicate the existing pedestrian push button. Additionally, there are very few wayfinding features to lead people to the Parkand-Ride or Old Town Niwot.

To enhance the connection along Niwot Road, potential improvements include improving the sidewalk surfaces and curb ramps, and delineating pedestrian crossing at the railroad tracks. Other improvements include replacing the missing pedestrian push button sign and adding concrete bumper blocks at the Park-and-Ride.





- IMPRING SIDEWALK SURFACE / PED. RAMPS / DRIVE-WAY RAMPS / SIDEWALK DELWEATION AT RE TRACK ETC.



Perspective Looking west towards the park-n-Ride from Niwot Road





Project 2 – Path Connection to Whistle Stop Park along Railroad



Currently, there is no defined pedestrian connection from Niwot Road to and through Whistle Stop Park. There is also a lack of wayfinding to indicate where the park is located to pedestrians on the sidewalk north of Niwot Road.

To enhance the connection to the park, one option discussed at the community workshop is to create two path connections from Niwot Road that connect through Whistle Stop Park. The addition of a park pathway would be contingent on the success of creating a path along the railroad. This would require working the railroad and other property owners. Signage along the path would help direct visitors toward event locations and the Old Town area.







Concept for pedestrian path through Whistle Stop Park



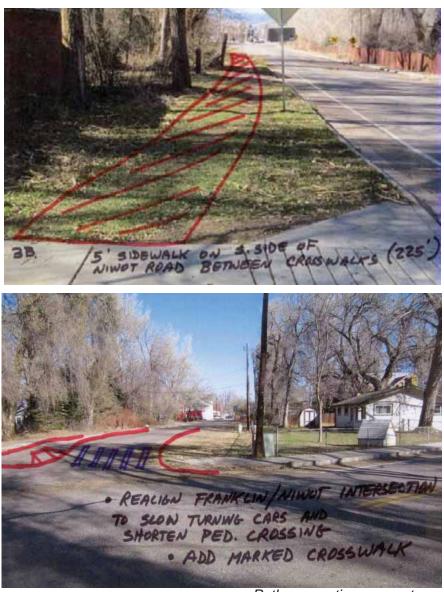
Project 3 – Improve Pedestrian Crossing and connection west of Franklin Street



3A-During the community workshop, ideas were discussed to improve pedestrian crossings to the east and west of Franklin Street, and calm traffic between the crossings. The existing crosswalks could be enhanced with the installation of "gate post" crossings that include back-to-back pedestrian crossing signs. Trimming overhanging vegetation would prevent the signs from being blocked. Directional and Historic signing will be included in the design as appropriate, consistent with the Niwot Historic character, and subject to Land Use regulations.

3B-Other options that came out of the workshop included sidewalks along the east side of Franklin Street and enhancing the stop for motorists on the west side of Franklin Street at Niwot Road.





Path connection concept



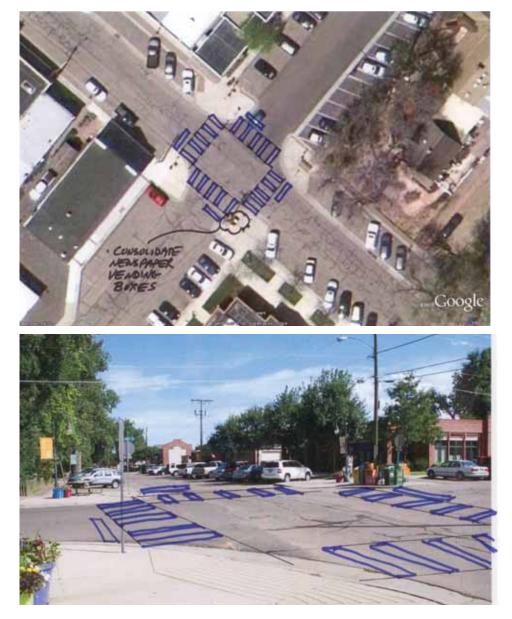
Project 4- Improve Pedestrian crossings at Franklin Street and 2nd Avenue



Niwot's Historic District is fine-grained and experiences frequent pedestrian activity between the local shops and restaurants. With restaurants, offices, the Left Hand Grange, and the old Niwot Tribune building on the corners of this intersection, it is an important area for pedestrians.

One option discussed at the community workshop is to add crosswalk striping and stop bars to call attention to the pedestrian crossings. This is particularly desirable during local events when auto traffic increases in the Old Town area. There was also discussion about consolidating the newspaper vendors into one cleaner kiosk and utilizing the corners as space for bicycle racks.







Project 5- Niwot Road/ 2nd Avenue intersection realignment and pedestrian crossing

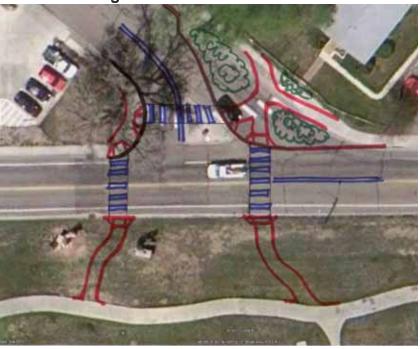


The current alignment of the Niwot Road and 2nd Avenue intersection is uncomfortable for pedestrians and limits access to the trail and tree sculpture park just across the street. Realigning the intersection would be an opportunity slow traffic turning right onto 2nd Avenue and enhance the pedestrian crossing.

The realignment would include removing the existing island and adding two new pedestrian crosswalks across Niwot Road, to and from the sculpture park. All corners of the intersection would be improved, including the rebuilding or adding of curb ramps. Overall, the project would include 200 feet of new sidewalks, 150 feet of new curb and gutter, and 1,000 sq. ft. of landscaped or streetscaped area in the northeast quadrant. Directional and Historic signing will be included in the design as appropriate, consistent with the Niwot Historic character, and subject to Land Use regulations.











Project 6- Stop control at the realigned Niwot Road/2nd Avenue Intersection and "shared street" improvements



6A- This project takes Project 5 a step further by including all-way stop control at the potentially realigned Niwot Road/2nd Avenue intersection and an additional pedestrian crosswalk at Niwot Road and 79th Street.

Stop control is appropriate at this intersection if additional traffic calming measures are desired, as it is likely not warranted by the current traffic volumes or intersection congestion. All-way stop control may be considered, however, if speeds on Niwot Road are too high at the pedestrian crossing.

The potential new crosswalk would be located on Niwot Road on the west leg of the Niwot Road/79th Street intersection, and may be implemented independently of the all-way stop control.

6B- Another option to calm traffic and enhance this area is by creating a plaza or "shared street" on Niwot Road between 2nd Ave. and Cottonwood Plaza. Specialty pavement, streetscaping, and landscaping are ways to enhance this area and link the two business centers. This treatment may also be coordinated with ongoing plans for enhancing the park.



6A- Consider all-way stop based on vehicular speeds



6B- Reconstruct roadway with specialty pavement in the future



Project 7 - Roundabout is no longer under consideration. See Appendix A



Project 8- Sidewalk Connection at 5th and Neva



There is currently a sidewalk along the south side of Neva Road. However, it ends abruptly and does not connect to another sidewalk or the street. This project proposes to add approximately 40 feet of new five foot wide sidewalk to connect the "dead end" sidewalk to the roadway surface at the intersection.







Neva sidewalk connection



Project 9- Improve Pedestrian crossing of Niwot Road at Niwot Market



9A-The current crosswalk to Niwot Market does not align with concrete sidewalks to the north or south of Niwot Road. This project concept involves the addition of two new sidewalk connections where the existing dirt path connections are located on the north side of Niwot Road. This project also includes a new signed and marked crosswalk on Niwot Road at the east edge of the Niwot Market driveway. "Back to back" pedestrian crossing signs are also included to warn motorists of the crossing.

9B- This project involves sidewalk connections south of Niwot Road to the existing businesses. This project would involve working with land owners to identity joint opportunities to enhance connectivity between project 9A and businesses on their property.





Improved crossing to Niwot Market





Project 10- Improve trail connection between the Loop Trail and Cottonwood Square



An informal trail currently connects the Loop Trail with Cottonwood Square. This project was discussed at the community workshop to potentially formalize the path connection.

The main element of this project would be a 940 foot gravel trail that would connect to the Loop Trail in two locations as indicated on the conceptual drawing. These connections would require new pedestrian bridges. Collaboration with the Cottonwood Condominium owner's association is necessary to define and formalize the connection into and through the residential area towards Old Town.





Project 11- Sidewalk connection along Niwot Road from Centerbridge/Sawtooth to Cottonwood Square



The existing underpass at Centerbridge Drive and the circuitous trail connection on the north side of Niwot Road requires significant out of direction travel for trail users. This project proposes to add a sidewalk connection along the south side of Niwot Road to provide a more direct connection to Old Town. This option would require extending the existing culverts or installing two new pedestrian bridges due to the steep side slopes, adjacent wetlands, and ditch. Right-of-way and easement issues would likely exist along Niwot Road as well.







Views east and west on Niwot Road



Project 12- Enhance Pedestrian crossing of Niwot Road at 83rd Street



12A-There is currently a crosswalk on the east side of the 83rd Street across Niwot Road, which provides pedestrian connectivity to the Left Hand Park. "Gate post" crossings with back-to-back signage would also enhance the visibility of the crosswalk

12B- A raised crosswalk with colored concrete would increase driver yielding and help slow traffic on Niwot Road. See also project 22.







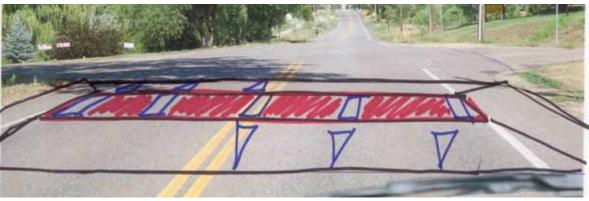
Project 13- Pedestrian crossing of Niwot Road at Longview Drive



13A- Sidewalks exist to the north and south of Niwot Road at Longview Drive, but there is currently no pedestrian crossing connecting them. Elements of this option include a marked pedestrian crosswalk on the west side of the intersection and sidewalk connections to the existing walks on the northwest and southwest corners. This project would include approximately 75 feet of 8 foot wide sidewalk and "Gate post" crossings with back-to-back signage to enhance crosswalk visibility.

13B- To address desired pedestrian crossing along Niwot Road, this crosswalk may be installed as a raised pedestrian crossing to increase motorist's attention to the crossing and slow traffic speeds. See also project 22.









Project 14- Improve Pedestrian access to Niwot elementary school



School zones with signed and marked crossings and sidewalk connections currently exist along Walker Ave. and Morton Road. Trimming vegetation and installing back-to-back signs would make the crossing more visible to motorists. Concerns were raised about parking and congestion during peak school access times. County may need to work with St. Vrain's school district to address possible improvements.









Project 15- Signage and traffic control at eastern driveway to main High School parking



The driveway to Niwot High School is clearly signed as "One Way" in the inbound direction and "Do Not Enter" in the outbound direction, yet motorists regularly disobey the signs. An alternative to spending funds on increased signage and traffic control would be considering education efforts through the High School and periodic enforcement of the one way drive.







Project 16- Complete missing trail connection at the east edge of Morton Heights



A trail connection exists on the eastern portion of the alignment and an informal dirt trail connection exists on the western end. This project will potentially formalize the connection with 165 feet of 8 foot wide sidewalk. There may be right-of-way (R.O.W.) issues associated with this project, although an emergency access easement and/or roadway R.O.W. already appears to exist.







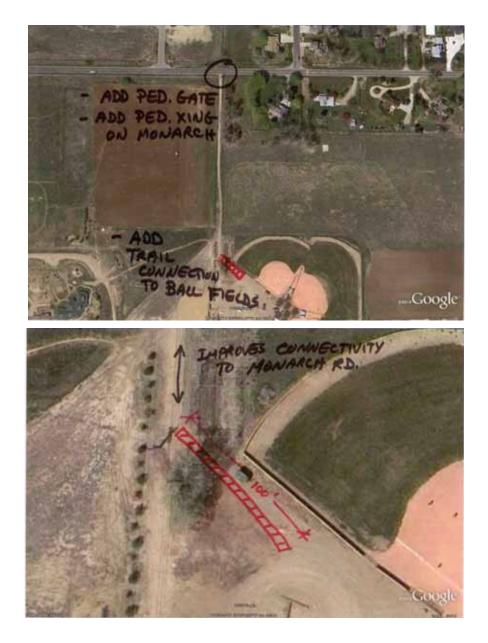
Project 17- Improve trail connections to Monarch Park ball fields



This project improves connectivity from the ball fields to Monarch Road, and the Niwot community, by formalizing the trail connection between the parking lot and gravel emergency access road. Elements of this project include the addition of a signed and marked pedestrian crossing and pedestrian gate on Monarch Road at the north end of the emergency access drive. Approximately 100 feet of enhanced gravel trail connection with bollards and signage in the northwest corner of the baseball field parking lot will help improve pedestrian access.









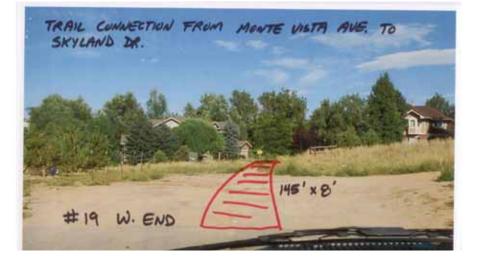
Project 18- Trail connection for access to Niwot Elementary School



An informal path currently connects Monte Vista Ave. to Skyland Drive. This concept will formalize the connection with a 145 foot trail connection to provide better pedestrian access to Niwot Elementary School









Project 19- Add trail connection between Legends Ridge loop trail and Somerset Drive



In order to connect the Legends Ridge loop trail with Somerset Drive, options for gravel trail connections exist in one or two locations. As the drawing shows, 65 to 100 feet of trail are needed. This option would be enhanced with a pedestrian gate as well as a signed and marked pedestrian crosswalk on Somerset Drive at the location of the new trail connection.











Project 20- Gravel trail connection between Meadow Lake Road and Loop Trail



An informal trail currently connects Meadow Lake Road to the Loop Trail. This option would include 600 feet of new gravel trail, and would require right-of-way or easement issues to be resolved.







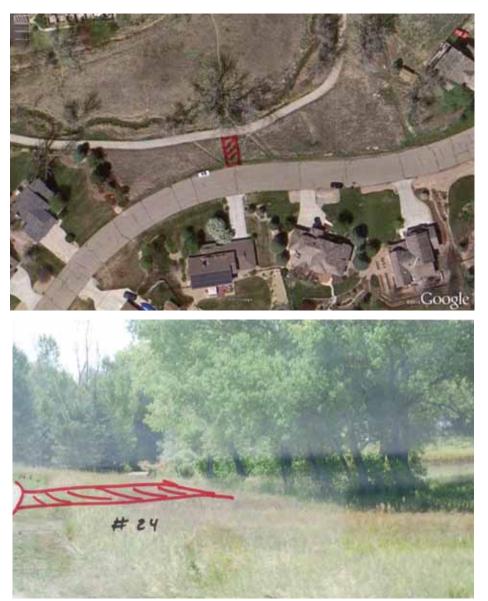
Project 21- Gravel trail connection between Centerbridge Drive and Loop Trail



Multiple informal trail connections are currently used to access the Loop Trail from Centerbridge Drive. Creating one enhanced gravel trail connection would better direct users toward the trail.









Project 22- Speed mitigation measures along Niwot Road



Existing speed data documents the current speeding issue along Niwot Road. The posted speed limit is 35 miles per hour (MPH), while the average speed is 39.2 MPH. With 80 percent of traffic exceeding the speed limit, speed mitigation measures are an option to increase safety along this corridor. The traffic calming package may include two enhanced pedestrian crossings at 83rd Street and Longview Drive, and two "other" new treatments (such as radar speed signs or speed humps) west of Centerbridge Drive and west of Elm Street.



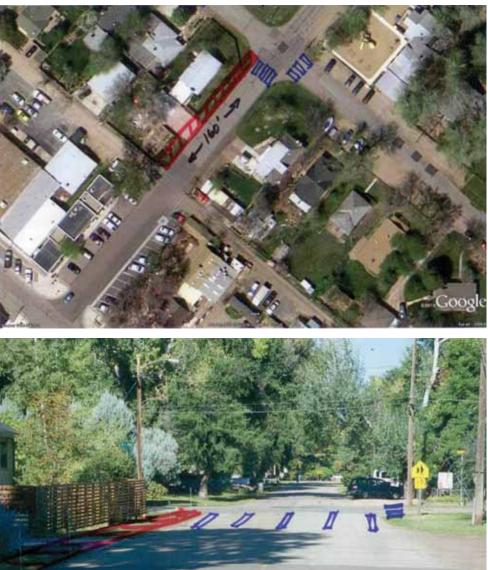


Project 23- Sidewalk on the west side of Franklin Street from Alley to 3rd Street



This project proposes an attached sidewalk on the north side of Franklin Street from the Alley to 3rd Street. The sidewalk would connect to the existing sidewalk on the south side of the alley. Pedestrian crosswalks at 3rd and Franklin would increase safety at the preschool. This project includes "Gate post" crossings with back-to-back signage to enhance crosswalk visibility as well as a paved or gravel "landing" between the crosswalks on the southeast corner of the intersection.









6. PARKING STUDY AND STRATEGIC RECOMMENDATIONS

A. Parking Inventory

Aparking inventory was conducted in August of 2011 for the entire area of the Niwot Local Improvement District (L.I.D.) show in yellow. The Niwot L.I.D includes the Niwot Rural Community District (N.R.C.D.) and Cottonwood Square Shopping Center as shown in the maps. The results of the parking inventory are also shown in this section. A more detailed block level analysis of the spaces is available from Boulder County.

The parking totals in August of 2011 are the following: Total Parking for the Niwot L.I.D is approximately **642** spaces

- This includes 362 spaces for the Niwot N.R.C.D
- This includes 280 spaces for Cottonwood Square

The Niwot N.R.C.D parking breakdown is:

- Approximately 199 publicly owned unmarked on-street spaces
- Includes all spaces along 2nd Street in the N.R.C.D. boundary
- Includes all spaces along Franklin Street in the N.R.C.D. boundary
- Approximately **163** privately owned off-street parking spaces on private property
- Includes spaces in parking lots in front and behind buildings
- Does not include all spaces behind Gunbarrel Imports



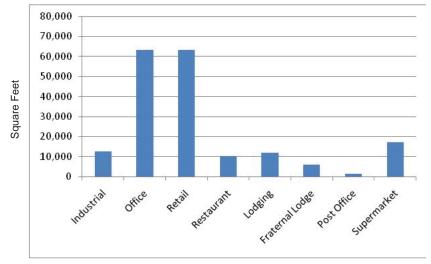




B. Land Use and Parking Requirement Comparison

An inventory of the total land use in the Niwot L.I.D, Niwot N.R.C.D., and Cottonwood Square Shopping Center was then conducted using data from the Boulder County Assessor's office. This data was used in conjunction with current Boulder County parking requirements to understand if there is a shortage or surplus of parking in the respective areas of Niwot. The results of the land use summary and parking standards are also shown on the following pages.

Niwot LID Land Use Totals by Category - August 2011



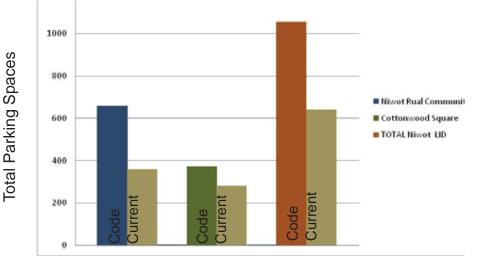






The parking totals in August of 2011 are the following:

- Total Existing Parking (642 spaces) is approximately **18%** (138 spaces) below the current code requirements (780 spaces) for the existing property usage
- This assumes all spaces in the Niwot L.I.D. boundary (N.R.C.D and Cottonwood Square) are shared and utilize the same Boulder County parking requirements
- This shortage is approximately 138 parking spaces (18%) if all land uses in the assessor's database are fully occupied as zoned



Niwot L.I.D. Land Use and Parking Requirement Comparison - August 2011





C. Parking Usage Study

Detailed parking usage studies were conducted on event and non-event days in August of 2011. The parking usage studies documented the presence of parked vehicles in the Niwot N.R.C.D. The peak study day was Thursday, August 18 when Rhythm on the Rails occurred. The off-peak study day was on Thursday, August 25. During both days a total of 360 parking spaces in the N.R.C.D. This included 200 on-street spaces and 160 off-street spaces. During this time photos of parked vehicles and partial license plates were recorded to determine how long vehicles parked in certain locations. The following is a summary of the results of the parking analysis. A more detailed block level analysis of the spaces is available from Boulder County.

The results of the August 2011 parking study are as follows:

Non-event day results

- Parking spaces in the Niwot L.I.D. boundary (N.R.C.D. and Cottonwood Square) were approximately 60% occupied during the entire day of the study
- During the peak parking time when approximately **60%** of the spaces were used (noon to 1:00 P.M.), there were approximately **84** on-street spaces and **66** off-street parking spaces available.

Event day results

- Parking spaces in the Niwot L.I.D. boundary (N.R.C.D. and Cottonwood Square) were approximately 100% occupied after 7:00 P.M. during the day of the study.
- During the peak parking time when approximately **100%** of the spaces were used (after 7:00 P.M.) there were very limited parking spaces available.

Parking duration on 2nd Avenue

2nd Avenue from Franklin Street to Murray Street

- Average parking duration was 2 hours
- The total vehicles parked during a day was 21
- The percentage of vehicles parked longer that 2 hours was 20%

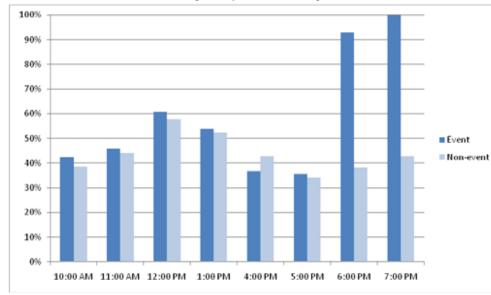
2nd Avenue from Franklin Street to Niwot Road

- Average parking duration was **1 hours**
- The total vehicles parked during a day was 27
- The percentage of vehicles parked longer than 2 hours was less than 1%

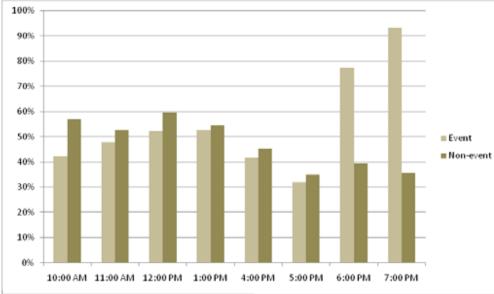


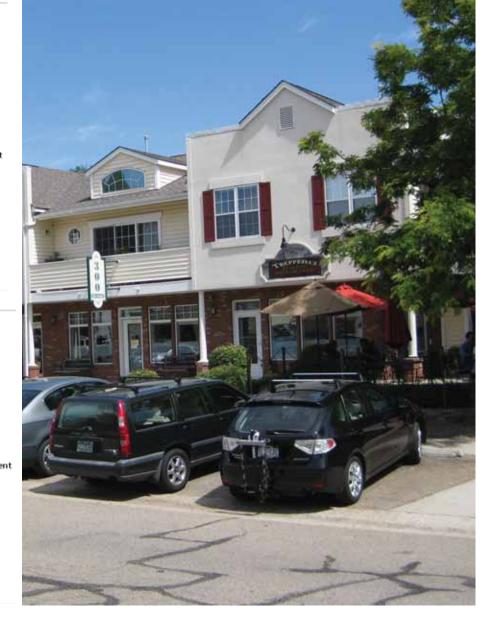
NIWOT TRANSPORTATION AND CONNECTIVITY PLAN

Niwot N.R.C.D On-street Parking Study Results - August 2011











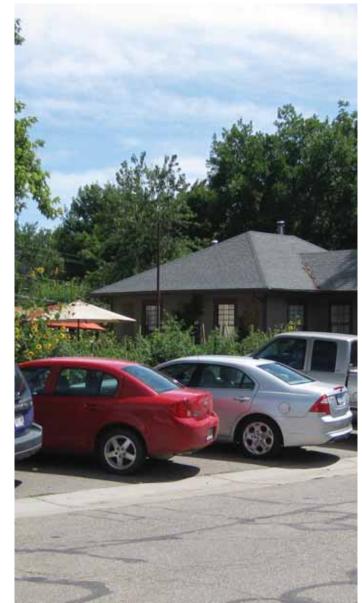
February 2012

D. Short-Term Parking Actions and Parking Toolbox

The following provides short-term parking actions and a "Parking Toolbox" of potential adjustments to consider as the parking conditions in Niwot change. The short-term actions will ensure a balanced parking supply that supports Niwot's economic, mobility, and community character goals. As discussed above, the parking analysis completed for this project indicates the overall parking supply is slightly under the current land use development code requirements. However, the parking usage study conducted for this project suggests the opposite. The study indicates that non-event days are not reaching the parking system's capacity. This might be explainable by the lower than average occupancy rates of commercial properties in Niwot, but may not fully represent the discrepancy in utilization. The current parking supply is about 40% underutilized on non-event days, and the current parking code suggests that there is 20% shortage of parking. These findings indicate the need for a strategic adjustment of the rates and requirements in the N.R.C.D.

The following short-term parking actions are designed to adjust parking policies to more adequately utilize existing parking resources. The key recommendation is to make adjustments to the parking system in Niwot based on warrants. The warrants will be based on reaching certain usage levels of the existing parking supply. A series of warrants will be used to plan and accommodate future parking needs when they are necessary. The short-term warrants are organized by parking utilization rates. The current parking utilization rate is 60%. There are warrants when 75%, 85%, and +85% are achieved. At such point there are a series of policies and physical actions that can be implemented. This is what is considered the parking "tool box". The "toolbox" allows for flexibility and allows for adjustments when the warrants are achieved.

The emphasis of this plan is cost-effective parking strategies that provide flexibility and preserve Niwot's unique character. The following recommendations will be supported by an annual parking study to determine if the warrants have been met.





Parking Utilization below 74%- Short term actions to consider in the N.R.C.D.

Policy Changes

Begin a process with Boulder County Commissioners and the public in early 2012 to amend the parking requirements in the N.R.C.D. This process would consider the following potential or similar changes to the current parking requirements.

- Existing properties in the N.R.C.D. would be allowed to change use without providing additional parking
- All reconstruction and new construction in the N.R.C.D., that adds additional square footage to an existing structure, would require providing parking at maximum rate of 1 space per 500 square feet (regardless of use)
- The distance to provide parking beyond the front door of a business would be increased beyond the current 250' maximum
- Allow for shared parking agreements via a Boulder County- approved shared parking agreement
- Amend the bicycle parking requirements as part of N.R.C.D. code to require bicycle parking when reconstruction and new construction in the N.R.C.D occurs
- Request employees of the N.R.C.D to park at edges of district
- Conduct parking utilization study on non-event day in August at a minimum of every 3 years or as needed

Potential physical improvements as needed

- Install new regulatory signage on 2nd Avenue
 - Signs limit parking to 4 hour parking for all parking where more turnover is desired
- Parking enforced by business owners with "courtesy cards"
 - Courtesy cards explain new parking procedures and provide store discounts
- Construct new bike parking in locations as shown in Appendix B
- Construct short-term multi-modal projects as outlined in previous section

Parking Utilization between 75-85% or one major new use is projected to increase demand to 75-85% - Actions to consider in the N.R.C.D.

Policy Changes

Work with the Boulder County Commissioners and the public to evaluate the parking requirements in the Niwot Rural Community District. This process may mean more strategic changes to the parking requirements.

Potential physical improvements as needed

- Stripe on-street parking spaces on 2nd Avenue
- Consider 45 angle parking on both sides of 2nd Avenue
- Update directional signage from entry areas
- Explore land ownership and location options for possible future parking facility
- Construct additional multimodal projects in previous section



Parking Utilization greater than 85%- Actions to consider in the N.R.C.D.

Policy Changes

Work with the Boulder County Commissioners and the public to evaluate the parking requirements in the Niwot Cultural Resource District. This process would make strategic changes to the parking requirements.

Potential physical improvements as needed

- Acquire or construct additional parking supplies previously identified (see 75% to 85% actions).
- Implement a comprehensive parking signage plan
- Construct additional multi-modal projects as outlined in previous section

Toolbox action to consider for Event Parking

Policy Changes

Implement a parking, shuttle, bike, and walking Action Plan using the following tools:

- Bike valet
- Shuttle and parking director to Niwot High School
- Crossing guards at Niwot Road
- Niwot L.I.D. leases spaces for events from Cottonwood
- Square during events
- Adjacent neighborhood residents receive premium seating at events
- Parking enforcement on Niwot Road bicycle lanes

Potential physical improvements as needed

• Construct short-term multi-modal projects as outlined in previous section



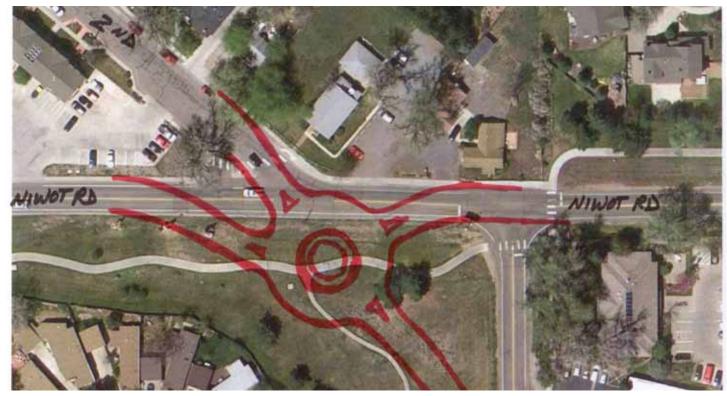
APPENDIX A: Original projects no longer under consideration



Formerly Project #7- Roundabout at the Niwot Road/2nd Avenue Intersection



A roundabout was discussed as a way to consolidate the Niwot Road/2nd Avenue and Niwot Road/79th Street intersections. This option would require adjacent park area and the removal of the new tree sculptures. This option would move vehicular traffic closer to the residential areas south of Niwot Road.



Roundabout Concept



NIWOT TRANSPORTATION AND CONNECTIVITY PLAN

APPENDIX B: Additional related projects received after workshops



Project AP1- Trail Refuge at Niwot Road & Niwot Square Road



This project proposes to "tighten up" the multi-use path crossing at Niwot Square Road and Niwot Road and enhance the trail crossing south of Niwot Road. This will increase visibility of the trail crossing and slow vehicle entry speeds into the neighborhood. The project will add an entry feature that serves as a median refuge for the trail crossing. The intersection will be narrowed to calm traffic and provide opportunities for additional public art and landscaping.











Project AP2- Bicycle Parking in Old Town Niwot



The Niwot community offers many attractions for a wide range of bicyclists. With a concentrated town center and great access to trails, Niwot is an ideal cyclist's destination. With the recent addition of the LoBo trail connection, cycling is bound to prove even more popular for Niwot residents and visitors alike. Niwot's small scale, accessible shopping, and lower traffic speeds make bicycling a convenient option for running errands, particularly in Old Town. However, there are limited and poor bike parking options currently available in the community. Improved Installation and locations for existing bike racks will allow for better utilization of existing bike parking. Increasing bike parking options in Niwot will further encourage and accommodate cyclists.



Bike rack is not secured to the ground and cannot hold non-standard bikes



Location of bike rack offers limited space to adequately park bikes



Spaces next to lampposts or in nooks provide ideal locations for a bike rack, without interrupting pedestrian or business access



Additional Related Projects

Bicycle and Pedestrian System Mapping: Update existing trail map of the area to include all existing trail and path connections. Make map available at local businesses to celebrate the incredible network of of bicycle and pedestrian connections in Niwot.

Niwot "Wayfinding" Signs: Design and implement a system of traveler information or "wayfinding" signs and post at strategic locations to lead the public to Old Town Niwot Historic District and Cottonwood Square.

Public Transportation: Consider options to increase convenience of public transportation and provide additional means of transportation for Niwot residents to access Old Town.

Consider improvements at the intersection of Niwot Road and Niwot Square Road: Intersection improvements could include a striped crosswalks and a center median within the roadway of Niwot Square Road. These enhancements could potentially slow traffic speeds turning onto Niwot Road while also serving as a gateway to the Cottonwood Park West neighborhood.





Consider integrating Cottonwood Square into the downtown pedestrian area

Extend 2nd Avenue to Cottonwood Square and install street furniture and trees to include Cottonwood Square as part of downtown.

Consider street patterns along 2nd Avenue to create a more pedestrian friendly and a unique street.

Spaces created by a new street pattern would potentially encourage outdoor pedestrian activities and informal social areas, while making 2nd Avenue distinct.

NIWOT 2nd Avenue Street Pattern







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