









- Develop a parallel Collector Street system approximately 400 - 600 feet from North College Avenue on both the east and west sides of the street. These streets will be classified as Collector without Parking and added to the City's Master Street Plan (see Appendix K). Primary limits for the parallel street system are:
 - East Side of North College Avenue - Between Vine Drive and Bristlecone Drive, and between Willox Lane and Spaulding Lane.
 - West Side of North College Avenue - Between Alpine Street and SH 1.
- Gated openings in the new median along North College Avenue shall be provided for emergency vehicle access at all public street intersections that do not have median openings. The gate mechanisms shall be operated by devices in fire trucks, ambulances, etc. during emergency calls.
- Exclusive right turn deceleration lanes are recommended at each of the signalized intersections.
- Additional RIRO access can be provided at the approximate locations shown on the aerial photographs. The location of these access points can fluctuate and is dependant upon the size or type of redevelopment that may occur. The minimum access spacing for a roadway with a posted speed limit of 35 mph (current speed limit between Jefferson Street and Vine Drive) is 225 feet, while for a posted speed limit of 40 mph (current speed limit between Vine Drive and SH 1), the minimum access spacing is 275 feet. The spacing requirements represent the distance between adjacent accesses or between an access and an adjacent public street intersection.

Location-Specific Improvements

- Reconstruct the existing Woodlawn Drive intersection on the west side of North College Avenue to align with a connection to the parallel street system on the east side of North College Avenue. These accesses would have ¾ movements and would be aligned at 90° to North College Avenue.
- Provide a public street connection to the parallel street system on the east side of North College Avenue opposite Alpine Street. This access would be limited to RIRO only.
- Install a new traffic signal at Pinon Street when appropriate traffic signalization warrants of the MUTCD are met and an approved engineering study indicates that a traffic signal will improve the overall safety and/or operation of the intersection.
- Construct an extension of Pinon Street on the east side of North College Avenue to the parallel street system. This improvement should be consistent with the re-alignment of Vine Drive as shown in the City's Master Street Plan.

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- Provide a public street connection to the parallel street system on the east side of North College Avenue at the approximate mid-point between Conifer Street and Pinon Street. A $\frac{3}{4}$ movement access would be permitted.
 - Reconstruct the Hickory Street/Conifer Street pair of offset “T” intersections to one 4-legged, traffic signal controlled, intersection. It is anticipated that the reconstructed intersection would align with Hickory Street on the west side of North College Avenue. Two through lanes and two left turn lanes are recommended for the Hickory and Conifer Street approaches to the intersection.
 - Provide a public street connection to the parallel street system approximately 475' north of Hickory Street. Movements would be limited to $\frac{3}{4}$ movements on the east side of North College Avenue and to only RIRO movements on the west side of North College Avenue.
 - Provide a public street connection to the parallel street system on the east side of North College Avenue opposite Hibdon Court. The intersection of this street with North College Avenue will be restricted to RIRO movements only, while a $\frac{3}{4}$ movement with Hibdon Court would be permitted.
 - Construct an extension of Bristlecone Drive on the west side of North College Avenue to the parallel street system.
 - Install a new traffic signal at Bristlecone Drive when appropriate traffic signalization warrants of the MUTCD are met and an approved engineering study indicates that a traffic signal will improve the overall safety and/or operation of the intersection.
 - Construct a $\frac{3}{4}$ movement access at approximately the mid-point between Willox Lane and Bristlecone Drive on the west side of North College Avenue.
 - Remove the raised island at the Albertson’s Shopping Center to allow for $\frac{3}{4}$ movements.
 - Construct an exclusive westbound right turn lane along Willox Lane at North College Avenue.
 - Provide public street connections to the parallel street system approximately 450' north of Willox Lane (both sides of the street). These streets would be limited to RIRO movements with North College Avenue.
 - Construct a left turn deceleration lane in the median for access to the new street connection adjacent to the Larimer & Weld Canal.

3.7 Cost Estimates

Conceptual opinions of probable costs (Year 2000 dollars) have been prepared on a more detailed segment-by-segment basis for both the Short-Term and Long-Range plans. Since the improvement recommendations are conceptual in nature, detailed cost estimates were not prepared. The following basis was used to develop conceptual cost estimates, which includes design, construction and construction observation but does not include right-of-way acquisitions or displacements/relocations:

- Traffic Signals - \$150,000 each.
- Private Access Reconstruction - \$2,000 each.
- Median Construction - \$80 per lineal foot.
- Alley Construction - \$25 per lineal foot.
- North College Avenue Arterial Construction - \$4,000,000 per mile.
- Minor Arterial Construction - \$2,500,000 per mile.
- Collector Street (Parallel Street System) - \$1,500,000 per mile.
- Bridge Construction - \$75 per square foot.

The per-mile construction costs for the Arterial, Minor Arterial and Collector streets were furnished by the City of Fort Collins. Table 3-4 presents the estimated total cost (in Year 2000 dollars) for all recommended improvements, divided into four sections for additional clarity.

Although the cost information provided in Table 3-4 provides a **conceptual level estimate** for the project as a whole, the Short-Term and Long-Range improvement recommendations were prioritized into groups of improvements so that the City will have a mechanism for allocating funding to these projects. These improvements have been prioritized by level of importance, and the project listing and associated costs are provided in Table 3-5 (Short-Term) and Table 3-6 (Long-Range). Given that the Short-Term improvements have a more definitive time associated with them, the priority listing documents the improvements in phases by level of importance. For the Long-Range improvements, a high, medium and low priority has been assigned since construction of these improvements would more likely occur as parcels redevelop. These cost estimates should be reviewed and updated as appropriate on an annual basis in order to reflect inflation. The prioritized improvements and associated cost are graphically summarized on Figures 3-20 (Short-Term) and 3-21 (Long-Range).

The Short-Term improvements do not include costs for lighting, sidewalk, drainage facilities, landscaping, right-of-way purchases, or property displacement or relocations. The Short-Term improvements do include the construction of medians and islands, curb and gutter, public alleys, private access connections caused by the construction of medians, and driveway re-construction. The Long-Range improvements include all of the items associated with the cost of Arterial, Minor Arterial or Collector streets as defined in the Fort Collins Design and Construction Criteria. Costs for these improvements were furnished by the City.

**Table 3-4
Conceptual Opinion of Probable Costs By Section**

Corridor Section	Total Cost Estimate ¹
Short-Term Plan	
Jefferson Street to Vine Drive	\$422,000
Vine Drive to Conifer Street	\$347,000
Conifer Street to Willox Lane	\$468,000
Willox Lane to SH 1	\$401,000
Entire Corridor	\$1,638,000
Corridor Section	Total Cost Estimate ¹
Long-Range Plan	
Jefferson Street to Vine Drive	\$2,313,000
Vine Drive to Conifer Street	\$8,025,000
Conifer Street to Willox Lane	\$5,914,000
Willox Lane to SH 1	\$4,487,000
Entire Corridor	\$20,739,000
¹ Cost estimates do not include cost for right-of-way acquisitions or displacement/relocations. All cost estimates are Year 2000 dollars.	

**Table 3-5
Conceptual Opinion of Probable Costs by Project - Short-Term Plan**

Project Description	Conceptual Cost Estimates
<i>Phase 1 - Jefferson Street to Vine Drive</i> - Second southbound left turn lane at Jefferson Street - Median north of Cherry and Willow Street - Driveway refinement - Back access connection to Willow Street - Access circulator between Maple and Cherry Streets	\$422,000
<i>Phase 2 - Willox Lane to Approximately 450' North of Willox Lane</i> - Median construction - Driveway refinement - Back access connection to Willox Lane	\$138,500
<i>Phase 3 - Approximately 250' South of Conifer Street to Approximately 150' North of Hickory Street</i> - Island construction - Driveway refinement - Restriping left turn lanes	\$133,000
<i>Phase 4 - Conifer Street to Bristlecone Drive</i> - Public alley construction - Driveway refinement	\$285,000
<i>Phase 5 - Vine Drive to Approximately 250' South of Conifer Street</i> - Driveway refinement	\$289,000
<i>Phase 6 - Bristlecone Dr. to Approximately 450' South of Willox Lane</i> - Driveway refinement	\$108,000
<i>Phase 7 - Approximately 450' North of Willox Lane to SH 1</i> - Driveway refinement	\$262,500
TOTAL	\$1,638,000

**Table 3-6
Conceptual Opinion of Probable Costs by Project - Long-Range Plan**

Project Description	Conceptual Cost Estimates
<p><i>High Priority</i></p> <ul style="list-style-type: none"> - Re-construct the Conifer and Hickory Street “T” intersections to one four-legged intersection \$1,154,000 - Re-construct North College Avenue to an Arterial Street between Jefferson Street and SH 1 \$11,156,000 - Connection to Vine Drive re-alignment at Pinon Street \$465,000 	
<p><i>Medium Priority</i></p> <ul style="list-style-type: none"> - Construct N/S parallel street (west side) between Hickory Street and Willox Lane \$858,000 - West extension of Bristlecone Drive \$142,500 - Upgrade Bristlecone Drive east of N. College Ave. \$184,500 - Construct N/S parallel street (east side) between Vine Dr. and Bristlecone Drive \$1,740,500 - Construct N/S parallel street (west side) between Alpine St. and Hickory St. \$652,000 - Upgrade Vine Dr. east of N. College Ave. \$193,000 	
<p><i>Low Priority</i></p> <ul style="list-style-type: none"> - Construct parallel street system (west side), Willox Lane to SH 1 \$1,245,000 - Construct parallel street system (east side), Willox Lane to SH 1 \$1,045,000 - Re-construct Willox Lane between east and west parallel streets \$243,000 - Construct E/W connector streets to parallel street system between Hickory St. and Willox Lane (both sides of N. College Ave.) \$843,500 - Construct E/W connector streets to parallel street system between Vine Drive and Hickory Street (both sides of N. College Ave.) \$817,500 	
<p>TOTAL</p>	<p>\$20,739,000</p>



