



6.0 ALTERNATIVE EVALUATION – NON-ROUTE BASED STRATEGIES

Non-route based strategies are seen as the least objectionable method of getting through trucks off the existing State Highway (SH) 14 and US 287 route. These strategies are used to encourage through truck traffic to use the Interstate system (I-25 and I-80) without constructing a new roadway. The strategies that were developed were refined by working closely with trucking industry representatives, various study committees, and affected agencies.

6.1 NON-ROUTE BASED STRATEGY EVALUATION CRITERIA

To evaluate the non-route based strategies, issues and concerns were gathered from many different sources. The information was combined to form a list of evaluation criteria that was approved by the Project Management Team, Policy Advisory Committee, and Stakeholder Committee.

Each of the individual criterion was given a measure of effectiveness that was used to assess the potential benefits and impacts of the non-route based strategies. The criteria was then separated by whether it was used for the unrealistic or comparative screening analysis. The unrealistic screening was the first phase of the screening process and was used to eliminate strategies that were unfeasible or unrealistic and had no chance of being implemented. The second phase of the screening process was a comparative analysis that provided a relative comparison between strategies to determine the most feasible options.

As seen in Table 6.1, the evaluation criteria used to screen unrealistic non-route based strategies included legality, safety, and consistency. If any of the non-route based strategies violated these criteria, they were removed from further consideration. Strategies removed as part of the first phase, elimination of unrealistic alternatives, are shown in Section 6.3.

**Table 6.1
Non-Route Based Strategy
Unrealistic Screening Evaluation Criteria**

Criterion	Measure of Effectiveness
Legality	Does the strategy violate the Interstate Commerce Act?
Safety	Does the use of non-route based strategies reduce accident potential along the existing route?
	Does the use of non-route based strategies increase accident potential along the Interstate system?
Consistency	Is the strategy consistent with the study goals?

Table 6.2 shows the evaluation criteria used to evaluate the remaining non-route based strategies as part of the second phase or comparative screening analysis. The comparative screening analyzed cost issues including initial and on-going maintenance costs, and strategy utilization. The strategy utilization represents the number of through trucks that would use the Interstate if the strategy were implemented. The comparative screening analysis for non-route based strategies can be found in Section 6.4.

Table 6.2
Non-Route Based Strategy
Comparative Screening Evaluation Criteria

Criterion	Measure of Effectiveness
Cost	What is the initial implementation cost of the strategy? What is the on-going cost of maintaining the strategy?
Strategy Utilization	How many trucks would be diverted to the Interstate as a result of the strategy?

6.2 INITIAL LIST OF NON-ROUTE BASED STRATEGIES

Based on input from the various committees and previous studies, including the *Triangle Project* (see Section 1.2.1), an initial list of strategies was developed. This list was refined through workshops with the trucking industry and meetings with the various study committees. The strategies include options that have been evaluated in previous studies, tried in other jurisdictions, and new strategies that have not been previously considered.

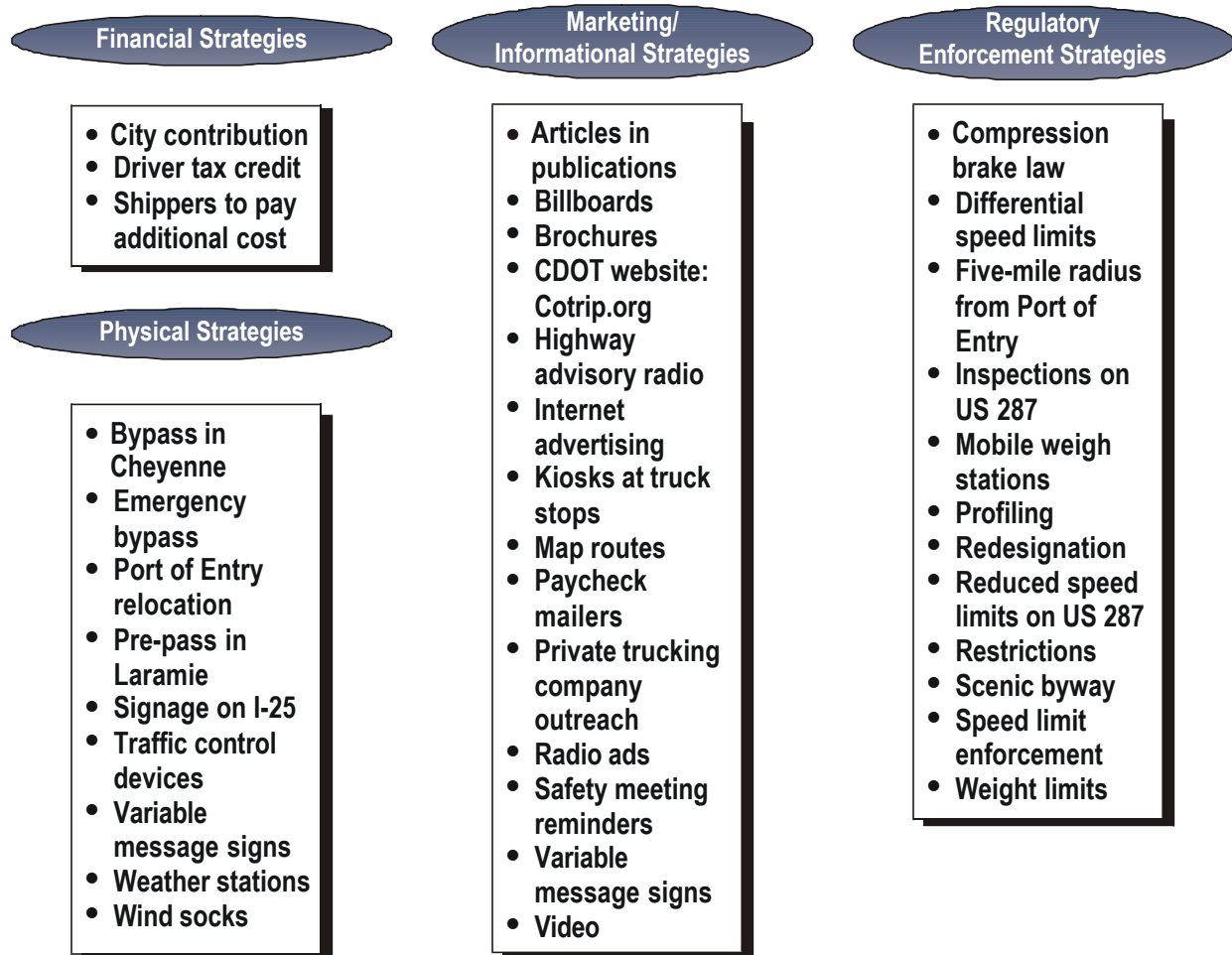
The initial non-route based strategies list is shown in Figure 6.1 and was grouped into four categories including: financial strategies, marketing and informational strategies, regulatory enforcement strategies, and physical strategies.

6.2.1 Financial Strategies

Financial strategies were evaluated because many truck drivers are paid based on the number of miles they travel and the fact that they have predetermined routes as defined by the shipping companies. The cost associated with any additional mileage is the responsibility of the driver. Financial strategies included incentive-based measures to encourage trucks to remain on the Interstate by subsidizing the additional expense to the truck drivers or shipping companies. These subsidies include:

- **City contribution.** Develop a mechanism for the City of Fort Collins to subsidize the additional cost for drivers/shippers to use the Interstate
- **Driver tax credit.** Establish a tax credit for drivers to offset the additional cost of using the Interstate
- **Shippers to pay additional cost.** Have shipping companies pay the additional cost for the drivers to use the Interstate

Figure 6.1
Initial Non-Route Based Strategy List



6.2.2 Marketing and Informational Strategies

The second category of non-route based strategies includes marketing and informational strategies that would be used to affect a change in the decision-making process of truck drivers as they approach I-80/US 287 from the north and I-25/SH 14 from the south. These strategies include different media to relay messages encouraging Interstate use. Media choices to market the trucking industry and relay information include:

- **Articles in publications.** Publish articles in trucking publications such as The Trucker, Overdrive, RPM, State Association newsletters, or Landline
- **Billboards.** Produce billboards that would advertise the advantages of using the Interstate
- **Brochures.** Create brochures for distribution through various means either in kiosks or as mailers
- **Colorado Department of Transportation (CDOT) website: Cotrip.org.** Promote the use of the CDOT website that has current weather, construction, and road condition information

- **Highway Advisory Radio (HAR).** Use the HAR (special radio bandwidth at 530 AM) to advise trucks of weather, construction, road condition information, and to reinforce the benefits of using the Interstate
- **Internet advertising.** Provide information on the benefits of using the Interstate on different websites such as the Colorado Motor Carriers Association (CMCA) and CDOT
- **Kiosks at truck stops.** Provide informational stations at truck stops encouraging the use of the Interstate, and information on current weather conditions, construction delays and detours, and general road conditions
- **Map routes.** Work with Rand McNally, publisher of the truck route guide, to change the recommended truck route from what it currently shows along SH 14/US 287
- **Paycheck mailers.** Include reminders for drivers in their paychecks to use the Interstate
- **Private trucking company outreach.** Develop a forum or media to contact private companies and encourage Interstate use
- **Radio ads.** Develop radio ads on popular stations in Colorado and Wyoming
- **Safety meeting reminders.** Provide reminders to drivers in their safety meetings about the benefits of using the Interstate
- **Variable message signs (VMS).** Provide more detailed weather, construction, and other information regarding roadway conditions on VMS
- **Video.** Make a video showing the benefits of using the Interstate

6.2.3 Regulatory Enforcement Strategies

The third category of non-route based strategies focused on regulatory strategies and was examined to assess any laws, ordinances, or other mechanisms that could be used as restrictive means to move trucks to the Interstate. Enforcement tactics include:

- **Compression brake law.** Increase enforcement by local law enforcement for trucks using compression brakes without a muffler within city limits
- **Differential speed limits.** Establish differential speed limits on US 287 that are higher for passenger vehicles than trucks
- **Five-mile radius from Port of Entry (POE).** Increase enforcement of trucks potentially avoiding the POE on I-25 near Prospect Street
- **Inspections on US 287.** Provide additional safety and weight inspections on US 287
- **Mobile weigh stations.** Provide additional mobile weigh stations at random locations along the existing route or in the City to check weights on trucks
- **Profiling.** Based on specific characteristics and assumptions, conduct safety and weight inspections on through trucks and increase enforcement of speed limits for truck traffic only
- **Redesignation.** Redesignate SH 14 so it is no longer a truck route
- **Reduced speed limits.** Reduce the speed limit for all traffic on US 287
- **Restrictions.** Create time of day and route restrictions to discourage truck traffic along certain routes

- **Scenic-by-Way.** Designate US 287 as a scenic corridor to discourage truck traffic
- **Speed limit enforcement.** Increase the enforcement of speed limits for both trucks and passenger vehicles
- **Weight Limits.** Increase weight limits on the Interstate from 80,000 pounds (lbs) to 85,000 lbs

6.2.4 Physical Strategies

The final category is physical non-route based strategies and includes options that would move truck traffic from the existing route with the use of newly constructed features. Physical strategies included:

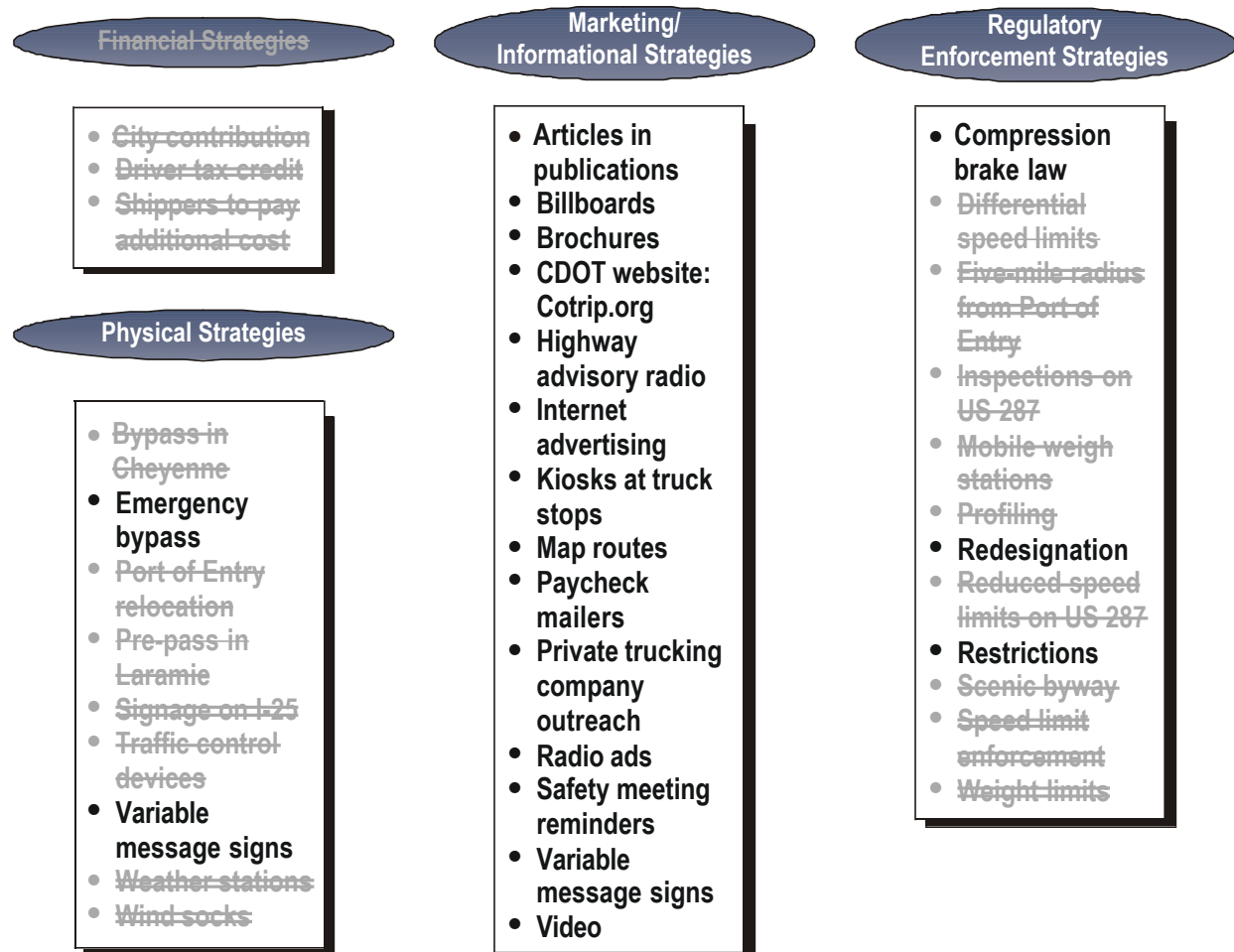
- **Bypass in Cheyenne.** Provide a bypass around Cheyenne to improve truck traffic flow
- **Emergency bypass.** Provide an emergency bypass that could handle the truck and general traffic, but would only be utilized in closure situations
- **Port of Entry (POE) relocation.** Relocate the existing POE from I25 near Prospect Street to north of the SH 14 interchange
- **PrePass in Laramie.** Add the pre-pass technology to the Laramie POE
- **Signage on I-25.** Remove signs on I-25 that direct Laramie bound traffic through the City of Fort Collins
- **Traffic control devices.** Add traffic signals and stop signs along the existing SH 14/US 287 route to increase travel time
- **Variable message signs (VMS).** Install additional VMS to provide weather, construction, and other information regarding roadway conditions
- **Weather stations.** Install additional weather stations along the Interstate route to inform drivers of weather conditions such as ice and wind
- **Wind socks.** Install wind socks on the existing Interstate route to provide wind direction information for drivers

6.3 UNREALISTIC SCREENING ANALYSIS FOR NON-ROUTE BASED STRATEGIES

The first phase, unrealistic strategy screening, was completed based on legal, safety, and consistency evaluation criteria as shown in Table 6.1. The evaluation was conducted in cooperation with the various study committees and trucking industry representatives. The strategies that were eliminated from further consideration are shown in Figure 6.2 with lines through them and the basis for their elimination is explained below.

No financial or marketing and informational strategies were eliminated as part of the unrealistic screening analysis.

Figure 6.2
Non-Route Based Strategy
Unrealistic Screening Results



Note: Non-route based strategies eliminated from further consideration in the unrealistic screening analysis are shown in gray with a single line through them.

6.3.1 Regulatory Strategies Eliminated through Unrealistic Screening

Some of the regulatory non-route based strategies were eliminated as part of the unrealistic screening analysis. They include:

- **Differential Speed Limits.** This strategy was eliminated from further consideration based on safety. Lowering speed limits only for trucks on a primarily two-lane roadway would create safety hazards with passenger vehicles traveling at higher speeds trying to pass trucks traveling at slower speeds.
- **Inspections on US 287.** Increased safety and weight inspections on US 287 were eliminated from further consideration because inspections already occur on US 287 near Laramie and I-25 near Prospect Street at the existing POE. Trucks are weighed and

inspected at these locations and existing infractions are between 1 and 4 percent. This strategy could be useful for local and regional trucks, but is not effective in dealing with through truck traffic. Continued practice of random inspections on city streets is helpful to ensure that trucks are obeying laws. Any inspections should be coordinated with the Colorado State Patrol Federal Motor Carrier Safety representatives, and the Commercial Vehicle Safety Alliance (CVSA) to ensure compliance with regional inspection standards.

- **Mobile Weigh Stations.** Providing more mobile weigh stations was eliminated from further consideration based on similar issues to those related to inspections on US 287. Also, mobile inspections in certain areas create safety concerns along two-lane roadways in terms of the need to provide areas to stop and weigh trucks without impeding traffic flow. Continued use of mobile weigh stations on city streets is helpful to ensure that trucks are not violating weight restrictions. Any inspections should be coordinated with the Colorado State Patrol Federal Motor Carrier Safety representatives, and the Commercial Vehicle Safety Alliance (CVSA) to ensure compliance with regional inspection standards.
- **Profiling.** This strategy was eliminated from further consideration based on legal issues. Through trucks cannot be legally singled out and treated any differently than any other trucks or passenger vehicles.
- **Reduced Speed Limits on US 287.** Lowering the speed limit on US 287 was eliminated from further consideration based on consistency with study goals. To lower speed limits on a state highway, a speed study is required. Speed limits on the roadways are then posted at the speed that 85 percent of the traffic is traveling. Along US 287, this speed study could actually warrant raising the speed limit in certain locations.
- **Scenic-by-way.** The concept of a Scenic-by-way designation was eliminated from further consideration because there are no regulations to restrict truck traffic along these types of roadways.

6.3.2 Physical Strategies Eliminated through Unrealistic Screening

Some of the physical non-route based strategies were eliminated as part of the unrealistic screening analysis. They include:

- **Bypass in Cheyenne.** A bypass in Cheyenne was eliminated from further consideration because there are currently no traffic operation problems in the Cheyenne area. This strategy is also located outside the study area and the Wyoming Department of Transportation (WYDOT) has no plans to modify I-25 in the area because they have no operational problems.
- **Port of Entry (POE) Relocation.** Relocation of the POE was eliminated from further consideration because it could actually encourage truck traffic to bypass the relocated POE to use the existing SH 14/US 287 route. The relocation also has impacts on local truck traffic in and around the City of Fort Collins that would be required to travel north of town and then back south to clear the port. The locations of POEs are determined by Federal agencies and are located to ensure that weight and safety requirements are met on roadways. The existing location of the POE on I-25 ensures that all trucks, local, regional, and through are being adequately monitored.

- **PrePass in Laramie.** Implementing the PrePass system in Laramie was eliminated from further consideration because it could actually encourage truck traffic to use US 287. The POE that is located south of Laramie on US 287 and the PrePass system would make it easier to clear the POE. Wyoming is already considering installing the PrePass technology to the POE near Laramie.
- **Traffic Control Devices.** Additional traffic control devices (signals, stop signs) were eliminated from further consideration based on safety concerns and traffic warrants. New traffic signals have to be warranted based on specific requirements and conditions, not just put into place to impede the flow of traffic. Additional traffic signals are being implemented on the existing SH 14/US 287 route as growth increases.

6.4 COMPARATIVE SCREENING ANALYSIS FOR NON-ROUTE BASED STRATEGIES

Following the unrealistic screening, the remaining strategies were refined to provide the necessary detail to complete the second level of screening, the comparative screening analysis. The comparative screening analysis was conducted to determine the strategies that best meet the goals of the study. This analysis was based on cost and strategy utilization evaluation criteria as shown in Table 6.2.

Information relative to the non-route based strategy comparative screening evaluation criteria is shown for the remaining strategies in Tables 6.3 and 6.4 grouped by category. Each evaluation criterion is shown along with the corresponding measure of effectiveness. For each strategy, the cost of implementation, operation/maintenance, first year cost per through truck removed, percent of through trucks removed, and number of through trucks removed are shown. Cost assumptions for the analysis are detailed in Appendix D.

6.4.1 Cost Evaluation

The evaluation of cost issues for the non-route based strategies included three different measures of effectiveness. Cost information on the remaining strategies is compiled in Table 6.3 and a description of each measure is explained below in more detail. The measures included implementation cost, maintenance cost, and the first year cost per truck removed.

Table 6.3
Cost Comparative Evaluation

Strategy	Measure of Effectiveness		
	Implementation	Maintenance	First Year Cost per Truck Removed
Financial Strategies			
City contribution	\$50,000	\$6.5 million	\$37.39
Driver tax credit	\$50,000	\$6.5 million	\$37.39
Shippers to pay additional cost	\$50,000	\$6.5 million	\$37.39
Marketing/Informational Strategies			
Articles in publications	\$40,000	\$500-10,000	\$1.52

Table 6.3 (cont'd)
Cost Comparative Evaluation

Strategy	Measure of Effectiveness		
	Implementation	Maintenance	First Year Cost per Truck Removed
Billboards	\$40,000	\$2,000-5,000	\$3.04
Brochures	\$40,000	\$1-2/brochure	\$1.83
CDOT website: Cotrip.org	\$40,000	\$8,000	\$1.46
HAR	\$40,000	\$8,000	\$1.46
Internet advertising	\$40,000	\$600 minimum	\$1.24
Kiosks at truck stops	\$45,000	\$8,000	\$1.61
Map routes	\$40,000	-----	\$1.22
Paycheck mailers	\$40,000	\$1-2/mailer	\$1.83
Private trucking company outreach	\$40,000	\$8,000	\$1.46
Radio ads	\$40,000	\$50/60 sec spot	\$1.30
Safety meeting reminders	\$40,000	\$1-2/reminder	\$1.83
VMS	\$140,000	\$15,000	\$4.72
Video	\$45,000	-----	\$1.37
Regulatory Enforcement Strategies			
Compression brake law	\$200,000	\$250,000	\$41.10
Five-mile radius from POE	\$200,000	\$250,000	\$41.10
Redesignation	\$50,000	-----	\$0.23
Restrictions	\$150,000	\$250,000	\$3.04
Speed limit enforcement	\$200,000	\$250,000	\$41.10
Weight Limits	-----	-----	-----
Physical Strategies			
Emergency Bypass	\$150,000	-----	\$13.70
Signage on I-25	\$20,000	-----	\$1.83
VMS	\$100,000	\$15,000	\$10.50
Weather Stations	\$5,000	\$2,000	\$0.64
Wind socks	\$1,000	\$500	\$0.14

Source: Various (See Appendix D)

6.4.1.1. Implementation Cost

The implementation cost for the non-route based strategies is the initial cost in 2001 dollars to get the strategy started. For financial strategies, the implementation cost of \$50,000 includes additional study and resources to develop taxing mechanisms. An implementation cost of \$40,000 for the marketing strategies includes the development of a marketing committee, and costs over \$40,000 represent additional equipment required. Regulatory enforcement strategy costs include expenses for additional officers and equipment, and the implementation cost for the physical strategies includes both materials and equipment. Implementation costs are considered to be one-time costs to implement the strategy.

6.4.1.2. Maintenance Cost

The maintenance cost is the annual cost in 2001 dollars to continue using the strategy. For financial strategies, the maintenance cost of \$6.5 million per year was calculated by multiplying the number of through trucks per year by the additional miles to use the Interstate route by the operating cost per mile for commercial vehicles as seen in the following calculation:

$$600 \frac{\text{through trucks}}{\text{day}} \times 365 \frac{\text{days}}{\text{year}} \times 17 \frac{\text{additional miles}}{\text{through truck}} \times 1.75 \frac{\text{dollars}}{\text{mile}} \cong \$6.5 \text{ million/year}$$

The existing operating cost for commercial vehicles is approximately \$1.75 per mile. The Interstate route is 17 miles longer than the existing SH 14/US 287 route. Thus, a driver making a one-way trip would need to be subsidized by approximately \$29.75 per trip. With an estimated 600 trips a day from the *Truck Origin and Destination Study*, the subsidy would be approximately \$17,850 per day or \$6.5 million a year. This is a conservative estimate because it is based on current (2001) dollars and does not account for inflation or the existing trucks that are already using the Interstate that would be entitled to the subsidy.

The annual maintenance cost for marketing strategies assumes the range of costs for the different media and would be determined by what strategies were used. The maintenance costs for regulatory enforcement strategies include salary and expenses for two additional officers and their equipment. For physical strategies, the maintenance cost includes industry standards for either replacement or repairs of the various devices.

6.4.1.3. First Year Cost per Truck Removed

The first year cost per truck removed is a combination of the implementation cost and the first year maintenance cost divided by the estimated number of through trucks removed per year. The estimated number of through trucks removed per year is discussed in the following section, strategy utilization. The following sample calculation is for the financial strategies to show how the first year cost per truck removed was developed.

$$\frac{\$50,000 \text{ implementation cost} + \$6,500,000 \text{ maintenance cost}}{480 \frac{\text{through trucks removed}}{\text{day}} \times 365 \frac{\text{days}}{\text{year}}} = \$37.39$$

6.4.2 Strategy Utilization

In addition to cost measures, the effectiveness of the strategy at removing trucks from the existing route was evaluated. Estimates of the number of through trucks that would utilize the Interstate if a particular non-route based strategy was implemented are shown in Table 6.4. A detailed discussion of the strategy utilization evaluation is provided below.

6.4.2.1. Percent and Number of Through Trucks Removed

The percent of through trucks removed from the existing SH 14/US 287 route is an estimate based on the particular strategy. These percentages were developed through one of the trucking industry workshops based on insights from industry representatives. For example, financial strategies have the greatest chance of keeping through trucks on the Interstate and could divert an

estimated 80 percent of through trucks from the existing route, while changing the signage on I-25 may divert only an estimated 5 percent of through trucks. The number of through trucks removed from the system is the percent of through trucks removed multiplied by 600 through trucks per day from the *Truck Origin and Destination Study* as seen in the following sample calculation for financial strategies:

$$0.80 (80\%) \times 600 \frac{\text{through trucks}}{\text{day}} = 480 \frac{\text{through trucks removed}}{\text{day}}$$

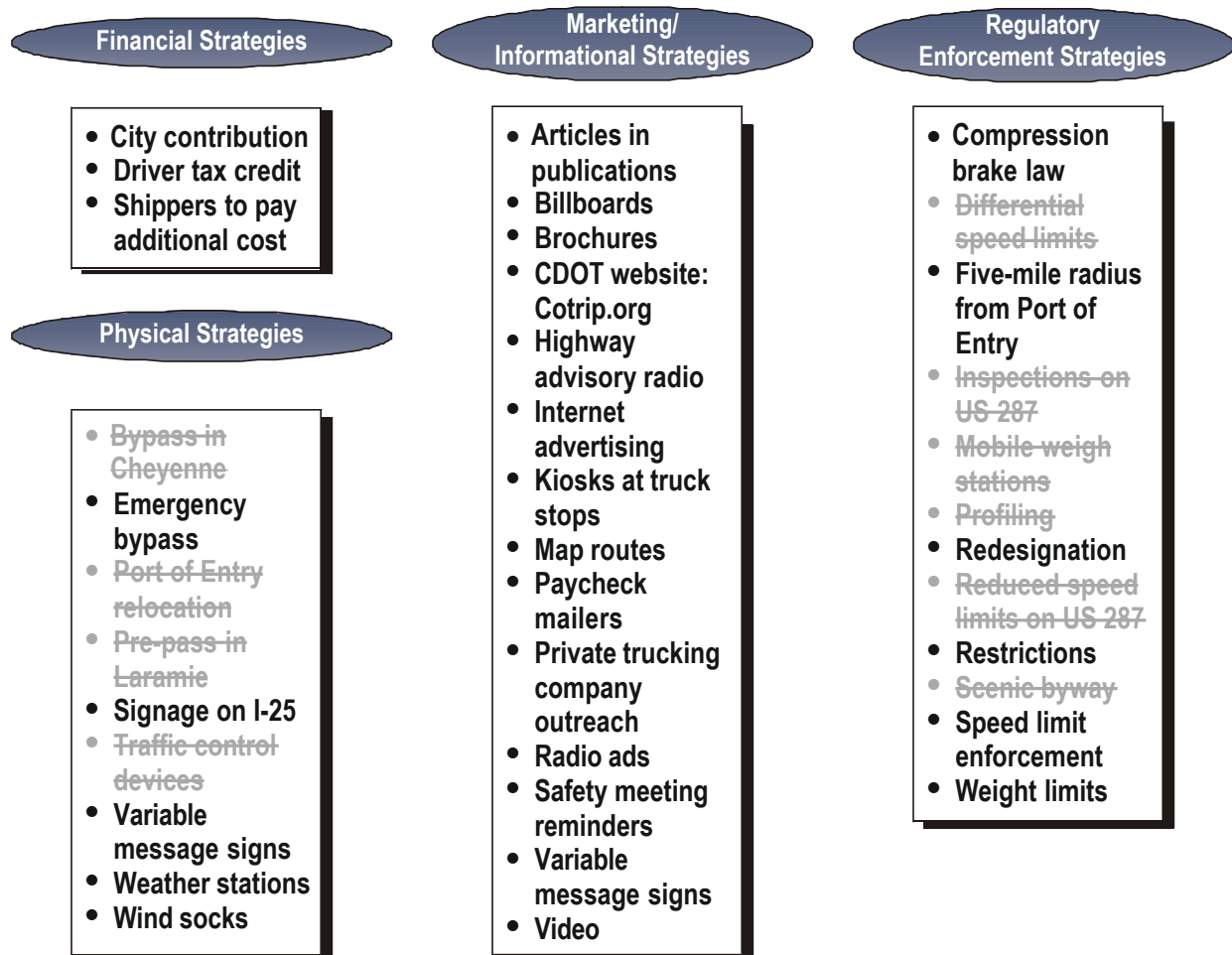
Table 6.4
Strategy Utilization Comparative Evaluation

Strategy	Measure of Effectiveness	
	Percent of Through Trucks Removed per Day	Number of Through Trucks Removed per Day
Financial Strategies		
City contribution	80	480
Driver tax credit	80	480
Shippers to pay additional cost	80	480
Marketing/Informational Strategies		
Articles in publications	15	90
Billboards	15	90
Brochures	15	90
CDOT website: Cotrip.org	15	90
HAR	15	90
Internet advertising	15	90
Kiosks at truck stops	15	90
Map routes	15	90
Paycheck mailers	15	90
Private trucking company outreach	15	90
Radio ads	15	90
Safety meeting reminders	15	90
VMS	15	90
Video	15	90
Regulatory Enforcement Strategies		
Compression brake law	5	30
Five-mile radius from POE	5	30
Redesignation	100	600
Restrictions	60	360
Speed limit enforcement	5	30
Weight Limits	-----	-----
Physical Strategies		
Emergency Bypass	5	30
Signage on I-25	5	30
VMS	5	30
Weather Stations	5	30
Wind socks	5	30

6.4.3 Non-Route Based Strategy Comparative Screening Results

The information from the second phase comparative screening analysis was used to further eliminate strategies that are not feasible. The strategies that were eliminated from further consideration during the comparative screening analysis are shown in gray with double lines through them in Figure 6.3 and the basis for their elimination is discussed in the following sections. The remaining strategies were used to develop the study recommendations.

Figure 6.3
Non-Route Based Strategy
Comparative Screening Results



Note: Non-route based strategies eliminated from further consideration in the unrealistic screening analysis are shown in gray with a single line through them and strategies eliminated in the comparative strategy screening analysis are shown in gray with a double line through them.

6.4.3.1. Financial Strategies

All of the financial strategies were eliminated from further consideration as part of the comparative screening analysis based on cost issues.

- **City contribution.** City contributions to subsidize the additional cost to use the Interstate were eliminated from further consideration due to the high cost and the lack of adequate City funding sources.
- **Driver tax credit.** Driver tax credits to subsidize the additional cost to use the Interstate were eliminated from further consideration due to high cost and difficulties with implementation. Tracking the vehicles that would be eligible for the tax credits and being able to administer the credit to drivers from various states would be difficult because there is no existing taxing relationship between the City of Fort Collins and the drivers.
- **Shippers to pay additional cost.** Having shippers pay the additional cost to use the Interstate was eliminated from further consideration because there is no legal cause for shipping companies to incur the additional cost.

6.4.3.2. Marketing and Informational Strategies

None of the remaining marketing or informational strategies were removed from consideration during the comparative screening analysis.

6.4.3.3. Regulatory Enforcement Strategies

Some of the regulatory enforcement strategies were removed from further consideration during the comparative screening analysis.

- **Five-mile Radius from Port of Entry (POE).** Based on additional research after the unrealistic screening analysis, increased enforcement of the 5-mile radius from the POE was eliminated from further consideration because of consistency with study goals. Trucks that avoid the POE do so because they are either overweight or are unsafe. Through trucks have a difficult time avoiding POE locations because they would be required to find a way around every POE that was located along the route they were using. In most cases, POE locations are set in specific locations to reduce the ability for trucks to avoid them. Continuation of enforcement procedures is recommended in lieu of additional enforcement.
- **Speed limit enforcement.** Based on additional research after the unrealistic screening analysis, this strategy was eliminated from further consideration as an increased enforcement tactic. Although not seen as an effective measure for encouraging through trucks to use the Interstate, agreement to the uniform enforcement of speed limits, especially on US 287 was supported. So, although not recommended as increased enforcement, monitoring speed limits for all types of vehicles is recommended as a continuation of existing practices.
- **Weight limits.** Based on additional research after the unrealistic screening analysis, increasing the weight limits on the Interstate was removed from further consideration as a non-route based strategy. There is a discussion nationwide to increase weight limits on

the Interstate from 80,000 to 85,000 lbs, but the effect on through trucks is minimal because through trucks are not currently violating weight restrictions. When mobile weigh stations are used to check truck weights in the City of Fort Collins, the infractions are mostly local and regional drivers that are operating overweight.

6.4.3.4. Physical Strategies

Some of the remaining physical strategies were removed from further consideration as part of the comparative screening analysis.

- **Signage on I-25.** Based on additional research after the unrealistic screening analysis, removing or changing the existing signage on I-25 was eliminated from further consideration based on consistency with study goals. Signage on I-25 directs travel to and from major cities as required for mobility along Interstates. Removing the signage violates standards for providing mobility and would not have an impact on the travel patterns of existing drivers.
- **Weather stations.** Based on additional research after the unrealistic screening analysis, additional weather stations were eliminated from further consideration based on consistency with study goals. Additional weather stations have no real affect on moving through truck traffic and could actually encourage the use of the existing route when adverse weather exists on I-25 and I-80.
- **Wind socks.** Based on additional research after the unrealistic screening analysis, wind socks were eliminated from further consideration based on consistency with study goals. Wind socks have low visibility on the Interstate and have no real affect on moving through truck traffic and could actually encourage the use of the existing route when adverse weather exists on I-25 and I-80.

6.5 NON-ROUTE BASED STRATEGY RECOMMENDATION INFORMATION

The strategies that remain in Figure 6.3 were used to develop the study recommendations as shown in Section 9.1. In some cases, the strategies could be implemented immediately. In other cases, the strategies are dependant on the construction of an alternate route. Also, certain regulatory strategies that were eliminated as increased enforcement tactics are recommended as a continuation of existing enforcement procedures. See Section 9.1 for a detailed discussion of the non-route based strategy recommendations.

6.6 LOCAL/MUNICIPAL CONTROL OF COMMERCIAL TRUCK TRAFFIC ON LOCAL ROADWAYS

6.6.1 Introduction and Problem Statement

As part of the evaluation of non-route based strategies, the question was continually asked, why can't the City of Fort Collins put truck restrictions on the roads through town? Citizens complain about safety concerns for motorists, pedestrians, and bicyclists as well as noise and vibration impacts to homes and businesses. Business owners and those in the trucking industry argue that commercial truck traffic is a vital and necessary part of an economically healthy community and

region and point to their safety record in response to criticisms. The ongoing struggle continues to be to find the balance between safety on local roadways, while not impeding services necessary for local and regional commerce.

6.6.2 Existing Conditions

There are some current restrictions on truck traffic that are in place throughout the City. The restrictions are typically in the form of roadway signage that provides route designation information, weight limitations for bridges and city streets, and hazardous material limitations. Figure 6.4 shows the existing truck restriction signage within the City of Fort Collins Growth Management Area (GMA).

The concern over safety and accidents continues to be an issue as to why truck restrictions on roadways should be considered. As part of the *US 287/SH 14 Access Management Report*, a safety and accident study was conducted along the SH 14/US 287 corridor. Based on data from 1986 to 1997, the main problem area is on North College between Jefferson Street and Conifer Street where the average accident rate over the 11-year period exceeded the statewide accident rate for similar roadways. Other portions of the corridor meet acceptable accident rates, including the City's arterial streets. Many of the safety related issues identified are being addressed by the recommended access improvements from the *US 287/SH 14 Access Management Report*. A similar safety analysis conducted for Vine Drive in 1999 reiterated that there are no safety/accident issues or traffic problems caused by trucks on Vine Drive.

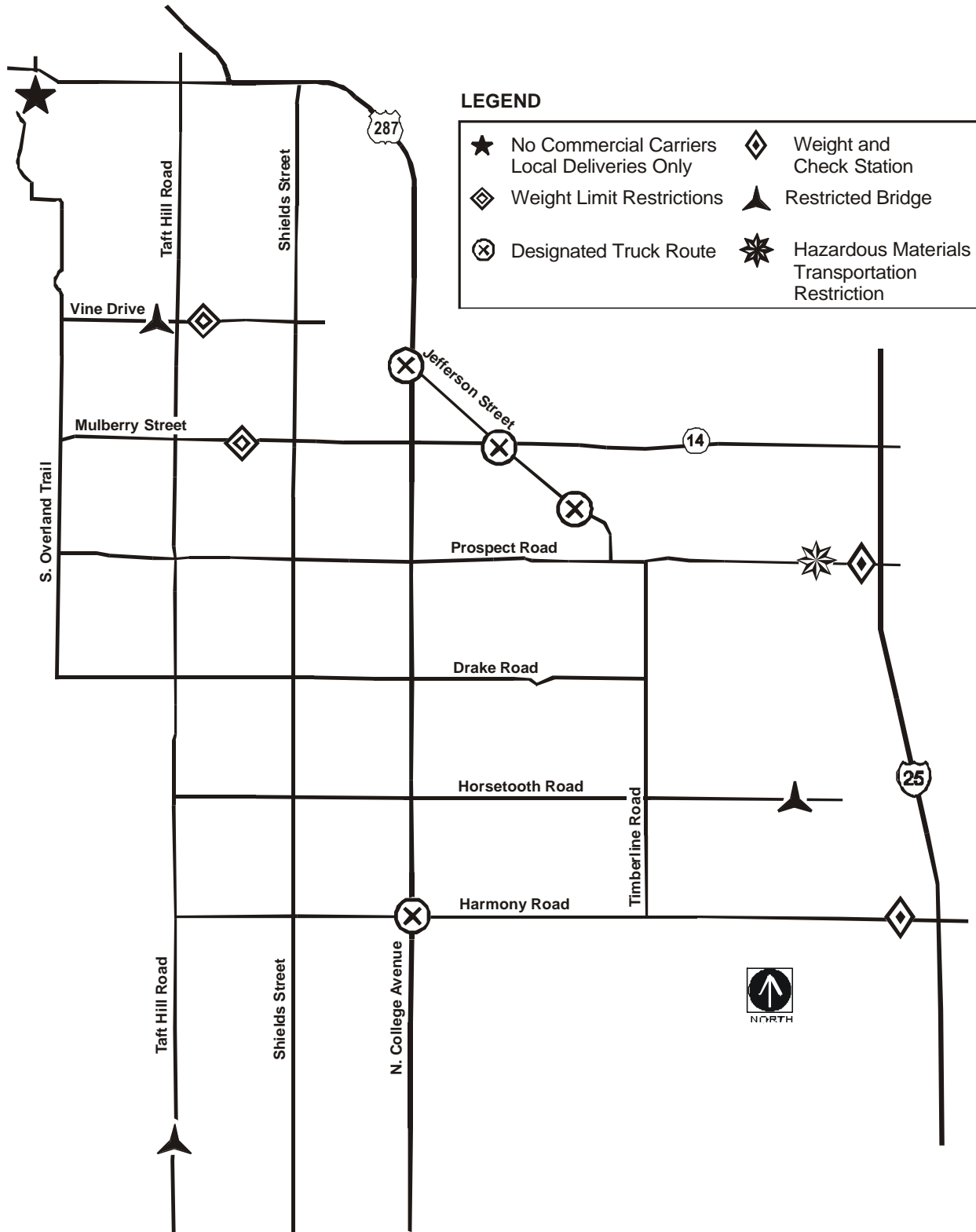
6.6.3 Legal Parameters

The *Model Traffic Code for Municipalities* has been adopted by the City of Fort Collins that outlines the duties and powers of the City traffic engineer. Based on the *Model Traffic Code for Municipalities*, the traffic engineer is empowered and authorized to establish truck routes (Section 23.9 [B21]). The traffic engineer is also allowed by the *Model Traffic Code for Municipalities* to designate and sign the streets upon which vehicles or loads of a certain weight shall be prohibited (Section 18.0). The City of Fort Collins designs and builds their arterial roadways to handle commercial vehicle traffic. It is important to note that the duties and powers of the City traffic engineer are limited to streets that the City of Fort Collins has limited municipal power over and thus does not apply to streets like Harmony Road, College Avenue, or even portions of SH 14 (Mulberry Street). These roads are either state or US highways that have shared jurisdiction between the City of Fort Collins and CDOT. As is true of all powers exercised by the City of Fort Collins, there are also constitutional limitations that must be respected if restrictions are imposed that limit the rights of those using public streets.

6.6.4 Local Issues

Several important issues exist that are related to the community and are not as clear as laws and ordinances. First is the issue of the potential impacts to local businesses and consumers. There are a variety of commercial businesses including grocery stores, construction companies, equipment dealers, automobile dealerships, and others that rely on the ability to ship and receive goods. Many of these businesses are located along various streets throughout the City of Fort Collins that are not state highways. Restrictions on truck traffic on these streets have the potential of dramatically affecting the welfare of some of these businesses. This is an issue that would be very controversial in the political arena and with local business organizations.

Figure 6.4
Existing Truck Restriction Signage



Source: City of Fort Collins

A second issue is the potential for cut-through traffic. Typically, when restrictions of any kind are placed on a street, traffic increases on adjacent streets. The effort of enforcing the restriction is typically focused on the street with the restriction, so adjacent roadways have the potential of being impacted with increased traffic. A very likely outcome of restricting truck traffic on arterial roadways is the corresponding increase in trucks using local neighborhood roads instead.

This leads to the final issue, the enforcement of restrictions. Restrictions whether by designation or limitation will need to be enforced. This requires local law enforcement time and the potential for additional resources to enforce the restrictions. These additional resources would need to be funded locally by the City of Fort Collins and strict guidelines would be required to provide direction to local law enforcement regarding the parameters of the restrictions. Enforcement of restrictions on truck traffic would have to uniformly apply to all trucks. It would be extremely problematic to discern between those trucks that have local or regional deliveries versus those who are simply passing through the area. Even if such a distinction could be made, this would likely be considered illegal profiling, a practice subject to litigation by the trucking industry.

6.6.5 Recommendations

It is apparent that there are significant issues involved in putting restrictions or trying to control truck traffic on City of Fort Collins streets. These issues include legal concerns, local business impacts, enforcement issues, and potential trucking industry opposition. The City of Fort Collins currently regulates truck traffic on local roadways within their jurisdiction, where applicable, in terms of weight restrictions, hazardous materials, and structural limitations. The City of Fort Collins also provides some guidance to drivers with signage along designated truck routes.

Currently, there are no overwhelming reasons to put restrictions on local roadways. This study concluded in the *Truck Origin and Destination Study* that a majority of the trucks seen in the City of Fort Collins have a reason to be there. An idea to address the issue of truck traffic on local roads would be to more clearly define and mark the designated truck routes. Instead of using restrictions on numerous roadways that raise all of the issues that have been discussed, focus on making sure that the truck drivers know the routes they should be using. Additional signage along the truck routes and education for drivers could be provided to reduce the truck traffic that may be using local roads instead of the major arterials.

While restrictions or control on local roadways are not recommended as part of this study, there are some non-route based strategy recommendations that will potentially provide some relief to the issue of truck traffic on local roads. One of the non-route based strategy recommendations discussed in Section 9.1 is the development of a local task force comprised of local business owners, trucking industry representatives, and City of Fort Collins officials. This task force is recommended to discuss the operation of local business deliveries in terms of frequency and time of day. This task force could also prove useful to educate and direct the businesses to use specific routes for shipping and receiving their goods in the City of Fort Collins.