

**Guidance for Crafting  
Vision Statements, Goals, Objectives & Measures of Effectiveness  
For  
Comprehensive Transportation Plans  
&  
Metropolitan Transportation Plans  
Final Version (3.17.11)**



## **Purpose**

The purpose of this guidance is to assist transportation planners and community leaders in developing the following portions of a Comprehensive Transportation Plan (CTP) and a Metropolitan Planning Organization (MPO)'s Metropolitan Transportation Plan (MTP), formerly referred to as a Long Range Transportation Plan (LRTP):

- Vision Statement (a desired future state of their transportation system);
- Goals (themes coming from the CTP/MTP Vision Statement);
- Objectives (how the community<sup>1</sup> will make progress towards achieving each Goal); and
- Measures of Effectiveness (how each Objective will be tracked).

## **Organization**

This guidance is organized into two parts:

- Part 1 discusses the background and the process for developing CTP/MTP Vision Statements, Goals, Objectives & Measures of Effectiveness; and
- Part 2 applies these concepts for possible Vision Statement “themes”, with discussion and examples of Goals, Objectives and Measures of Effectiveness.

## **Special Thanks**

The following folks participated in the development and review of this document.

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## **Got Feedback?**

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<sup>1</sup> “Community” in this document is used as a general term for the citizens of the CTP/MTP area, both the public and elected officials. A specific public involvement plan is developed for each CTP/MTP, which designates whether a steering committee or some other group of stakeholders will be used and how the general public will be engaged.

## Part 1: The Setup

### Why do we have to do a CTP?

The requirement for a CTP comes from the North Carolina General Statutes (NCGS) Section 136-66.2:

*“Each municipality, not located within a metropolitan planning organization (MPO) as recognized in G.S. 136-200.1, with the cooperation of the Department of Transportation, shall develop a comprehensive transportation plan that will serve present and anticipated travel demand in and around the municipality. The plan shall be based on the best information available including, but not limited to, population growth, economic conditions and prospects, and patterns of land development in and around the municipality, and shall provide for the safe and effective use of the transportation system. In the development of the plan, consideration shall be given to all transportation modes including, but not limited to, the street system, transit alternatives, bicycle, pedestrian, and operating strategies.”*

### So what are the minimum requirements for a CTP?

From NCGS (citation above) the minimum requirements for a CTP are:

- addressing “safe and effective utilization of the transportation system”;
- consider “all transportation modes”:
  - Highways;
  - Public Transportation;
  - Rail facilities;
  - Bicycle facilities;
  - Pedestrian facilities; and
- consider “operating strategies” for all modes.

### Beyond the minimum requirements, what else can go in a CTP?

A CTP can include any other transportation issue or concern. What is included depends on what’s important to each community (some of these issues are discussed in Part 2).

### Why do we have to do a MTP?

Metropolitan transportation planning processes are governed by Federal law and applicable state and local laws if Federal highway or transit funds are used for transportation investment. 23 CFR 450.322(a) states:

*“Development and content of the metropolitan transportation plan. The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date...”*

### So what are the minimum requirements for a MTP?

From 23 CFR 450.322(f), the MTP “shall, at a minimum, include:

- 1) *The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;*
- 2) *Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. In addition, the locally preferred alternative selected from an Alternatives Analysis under the FTA's Capital*

*Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309;*

- 3) Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;*
- 4) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide;*
- 5) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system;*
- 6) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity rule (40 CFR part 93). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;*
- 7) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;*
- 8) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g);*
- 9) Transportation and transit enhancement activities, as appropriate; and*
- 10) A financial plan that demonstrates how the adopted transportation plan can be implemented.”*

### **Beyond the minimum requirements, what else can go in a MTP?**

A MTP can include any other transportation issue or concern. What is included depends on what's important to each community (some of these issues are discussed in Part 2).

### **What is a Vision Statement?**

A CTP/MTP Vision Statement could be called a picture of a community's transportation system in the future, but it's really more than that. A Vision Statement is the inspiration, the framework for a community's strategic planning. It should resonate with all stakeholders and help them feel proud, excited and part of something much bigger than themselves. A Vision Statement should stretch the community's transportation capabilities and image of itself. It gives shape and direction to the transportation system's future. It answers the question, “*Where do we want to go?*”, while not inhibiting the development of the strategies that will allow the community to

reach the desired future state. A Vision Statement should be unique to each community. It really reflects what's important to each community—not just boilerplate language that sounds good from somewhere else.

A Vision Statement can focus on a single concept/theme or it can focus on several. For purposes of this document “theme” will be used to represent discrete desires of the community. A theme typically is represented by one or two words. For example, in a Vision Statement of “*Our transportation system is safe and efficient*”, “safe” and “efficient” are separate themes.

A good Vision Statement should have these characteristics:

- It is written in the present tense, as if the vision has been reached now;
- It has a powerful phrase;
- It describes the best outcome achievable;
- It does not specify a particular period of time;
- It does not provide numeric measures of success;
- It uses unequivocal language (not business speak or words like “maximize” or “minimize”);
- It evokes emotion; and
- It helps build a picture, the same picture, in people's minds.

**FHWA's Vision Statement:**

*“Our Agency and our Transportation System are the Best in the World”*

Look at the FHWA Vision Statement (box to the right) and think about whether it has these desired elements or not.

- Is it written in the present tense? Yes. FHWA may not be the best agency (yet) and the nation's transportation system may not be the best in the world (yet), but the vision statement is written as if it is the best now.
- Does it have a powerful phrase? Yes. Being the “best in the world” is quite powerful.
- Does it describe the best outcome achievable? Yes. You can't get much better than the best in the world (unless you start considering other worlds)! Being the best in the world may take some time, but even though this vision statement may seem out of reach to some, obviously FHWA believes that it is achievable.
- Does it use unequivocal language? Yes. It's written in plain language with no wiggle room.
- Does it evoke emotion? Yes. Aspiring to be the best in the world creates a sense of pride and determination.
- Does it help build a similar picture in people's minds? Maybe. Although everyone can imagine what the “best in the world” means to them individually, there still can be differences of opinion as to a collective picture of “best in the world”.

### **What are Goals & Objectives?**

In many situations people use the words “goals” and “objectives” interchangeably.

According to Dictionary.com, a goal is defined as: “*the result or achievement toward which effort is directed; aim; end.*” That same source defines an objective as: “*something that one's efforts or actions are intended to attain or accomplish; purpose; goal; target.*”

We see similarities in the definitions, yet in the context of a CTP/MTP, the difference between goals and objectives has an important practical meaning.

Goals help to shape how a vision will be achieved. They do not have to be specific enough to be acted upon, but should provide a future performance target or list of things to be worked on.

Goal vs. Objective	
Goal	Objective
Broad	Narrow
General	Precise
Intangible	Tangible
Abstract	Concrete
Hard to measure	Measurable

Objectives are specific, measurable steps that can be taken to meet a goal. It's acceptable to have more than one objective for a goal. If this occurs, then it's prudent to assess the several objectives to determine if all are really necessary to track progress towards the goal. If so, then keep the several objectives. If not, then consider identifying the single objective that most accurately tracks progress towards the goal and eliminating the rest. Having more objectives might provide a more complete assessment, or it might just be unnecessary effort.

In articulating goals, a community can choose to have a goal for each theme (see NCDOT Goals example in the box to the right) or the goals can be combined (e.g. "a safe, efficient, multimodal transportation system"). There are many ways to formulate goals, so it's at the discretion of the community.

**NCDOT's Goals:**

- *Make our transportation network **safer**.*
- *Make our transportation network move people and goods more **efficiently**.*
- *Make our infrastructure **last longer**.*
- *Make our organization a place that **works well**.*
- *Make our organization a **great place** to work."*

### Critiquing sample goal statements:

"*The goal is to have a safe transportation system.*" This wording is fine. It sufficiently conveys a desired end state, but does not specify how it will be achieved (that's the role of objectives).

"*The goal is to provide another river crossing.*" This is probably a solution to a specific problem that is not ascertainable without further investigation. Therefore, this is inappropriate wording since goals should not specify solutions.

### Should We Get "SMART" with Objectives?

Absolutely! SMART<sup>2</sup> is an acronym to assist in the writing of objectives. For our purposes, the words we use to make up the SMART acronym are:

- **S**pecific;
- **M**easurable;
- **A**chievable;
- **R**ealistic; and
- **T**ime-bound.



<sup>2</sup> SMART web resource: <http://www.rapidbi.com/created/WriteSMARTObjectives.html>

Applying SMART principles during the development of objectives will help the community articulate:

- What problem(s) are we trying to address?
- What level of performance do we ultimately want?
- What measurement will we use to track progress?
- When do we want to achieve this?

### **Specific**

Objectives should be straightforward and emphasize what you want to happen. Specifics help us to focus our efforts and clearly define what we are going to do. Specific is the What, Why, and How of the SMART format.

Ensure the objective you set is very specific, clear and easy to understand. Instead of setting an objective to “increase safety”, set a performance target to reduce a crash type by a certain amount.

### **Measurable**

If you can't measure it, you can't manage it. In the broadest sense, the whole objective is a measure; if the objective is accomplished, that is a success. Choose an objective with measurable progress, so change can be seen. How will you see when an objective is reached? Be specific. “A Critical Crash Rate below the statewide average” shows the specific performance target to be measured. “A safe road” is not as measurable.

Establish concrete criteria for measuring progress toward the attainment of each objective. When progress is measured, we stay on track, reach our performance target dates, and experience the satisfaction of achievement that spurs us on to continued effort required to reach your goals.

### **Achievable**

If an objective is set too far out of reach, we probably won't commit to doing it. Although we may start with the best of intentions, the knowledge that it's too much means we might not give it our best effort since we know we can't achieve it.

An objective needs to stretch us slightly so we feel we can do it and it will need a real commitment from us. For example, if we desire to “eliminate all traffic fatalities”, we know that isn't achievable. But setting a performance target to reduce traffic fatalities by a certain amount might be.

### **Realistic**

Realistic means “do-able.” It means that the resources needed to do the work are available and that the project fits with the overall strategy and goals of the CTP/MTP. A realistic objective may push our resources but it shouldn't break them.

An objective of never having congested streets may not be realistic for a community that is growing faster than the resources to make transportation modifications. However, an objective of maintaining a certain level of service on the CTP/MTP road network may be realistic.

Set an objective that is attainable with some effort. If it is too difficult to attain, it sets the stage for failure--too low could indicate a lack of seriousness. Set the performance target high enough for a satisfying result.

## Time-bound

Set an appropriate timeframe for the objective. Putting an end point provides a sense of urgency that probably won't be present if the objective has an open-ended completion date.

## Helpful questions to ask when crafting objectives:

- What aspect(s) of [fill in theme] is (are) most important to the community?
  - What modes (e.g. highway, transit, bike, pedestrian)?
  - What statistic (e.g. injuries, level of service, miles of trails)?
- Is there quantitative or qualitative data that will help define the problem?
- Is the data reliable enough to use as an evaluation factor?
- Is there sufficient knowledge to establish a desired performance level?
- Is there sufficient knowledge to suggest solutions that will help meet the desired performance target?

## Sample template for crafting an objective:

The following template will assist in crafting a SMART objective.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

The “verb” describes the desired direction (up or down) of the measure of effectiveness. Examples of verbs are: increase, decrease, achieve, reduce.

The “performance target” describes what level of performance (based on the measure of effectiveness) is desired. If the measure of effectiveness is vehicle speed, then the performance target would be the desired speed. The performance target also must be achievable.

The “measure of effectiveness” describes what metric will be used to track progress towards the performance target. Example measures of effectiveness are: fatalities, speed, injury rate, level of service, pavement condition.

The “transportation facility” describes what type(s) of modal facility is the objective about. Examples are: sidewalks, greenways, roads, urban arterials, Strategic Highway Corridors, rural bridges.

The “time” describes when the objective is intended to be accomplished. For CTPs/MTPs, it is usually the plan's horizon year, although an objective could have an earlier desired time for accomplishing the objective.

When crafting an objective, the order of these parts is flexible. What's more important is that each part is contained in the objective. For example, an objective might be crafted as: “*Achieve a Level of Service “C” on rural arterials in the County by 2040*”. From the formula, the verb is “achieve”, the performance target is “C”, the measure of effectiveness is “Level of Service”, the transportation facility is “rural arterials in the County” and the time is “2040”.

## What are Measures of Effectiveness?

Measures of effectiveness quantitatively tell us whether we are making progress towards achieving our objectives, and thus our goals. They are a tool to help us understand, manage,



and improve a community's transportation system. They also provide us with the information necessary to make intelligent decisions about what we do.

A measure of effectiveness is composed of a number and a unit of measure. The number gives us a magnitude (how much) and the unit gives the number a meaning (what). A measure of effectiveness is part of an objective. Therefore, there should always be a measure of effectiveness for each objective.

Measures of effectiveness can either be output-based or outcome-based. Using pedestrian safety as an example, an output-based measure of effectiveness could be the number of crosswalks installed or the amount of sidewalk length constructed. An outcome-based measure of effectiveness would be the number of pedestrian crashes reduced.

### **So What if the Community Doesn't Understand the Transportation Lingo?**

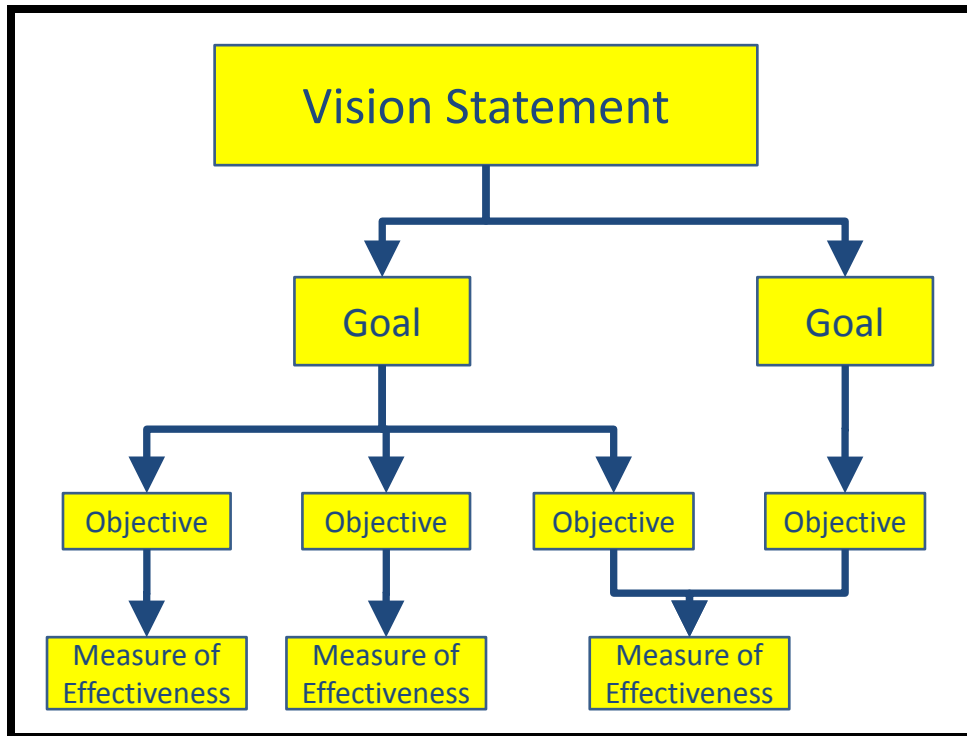
While it might be easy for a transportation professional to comprehend different LOS standards or the difference between a critical crash rate and a statewide average crash rate, we shouldn't assume that others automatically have the same knowledge. We need to ensure that the community understands what performance targets (using our lingo) mean in terms they understand. There are many ways to educate the community in transportation-speak. Figure out how best to educate your community. One method is described below.

Let's assume a community chooses to use Level of Service (LOS) as a measure of effectiveness. When we ask "OK, *what LOS do you want for your community?*", they may or may not know. Rather than having them pick a performance target that they don't really understand, we could simply ask them for their opinions on good and bad performing roads. Once we get a sense as to which roads they feel are operating satisfactorily and which are not, we could then assess these roads for LOS and then get back to them with "*You said Road X was performing acceptably and Road Y was not. We calculated the LOS for each and Road X is currently operating at LOS E and Road Y is operating at LOS D*". By engaging the community this way, we can help them understand the differences between measures of effectiveness levels and thus determine what performance targets they want (in this example they'd probably arrive at LOS D for their performance target).

### **Let's Recap some of the Differences**

How many of each?

- There's only one Vision Statement. The Vision Statement can have as many or a few themes as the community desires.
- Each theme in a Vision Statement must be addressed by a goal. A community can have a goal for each theme (see examples later in this document), or a community can have a goal addressing multiple themes—this is at the discretion of the community.
- There must be at least one objective for each goal. A community can, and most likely will, have multiple objectives for each goal.
- There must be at least one measure of effectiveness associated with each objective. As measures of effectiveness are identified, it may become apparent that a single measure of effectiveness can address multiple objectives—this is perfectly acceptable.



How “do-able”?

- A Vision Statement needs to be within the realm of possibility. Not necessarily achievable within the planning time-frame, but possible at some point in the future.
- A goal should ideally be accomplished by the end of the planning period. It’s not required, but when a plan is later updated, the plan should be evaluated to determine whether the goals were met or not. If a goal was not met, then maybe it wasn’t realistic to expect success, or, maybe the earlier decisions on project selection weren’t the best decisions to reach the goal.
- Objectives should be achieved by the end of the planning period, or earlier if desired. As the objectives really function as the “roadmap” for success, these need to be able to be completed within the planning timeframe.
- Goals and objectives drive the choices made in the development of the CTP/MTP. CTP/MTP maps of recommendations should be developed from the goals and objectives, not separate from them.

### **The Chicken, the Egg and the Community**

There is a sequence to the development of a Vision Statement, goals, objectives and measures of effectiveness, with the community being involved at certain points.

Visioning comes first. We need to have the “big picture” (the vision statement) before we can start figuring out how to achieve it (the goals & objectives). The visioning process is where the community should have an opportunity to weigh in on what’s important relative to their transportation system. Visioning is a brainstorming session, where “themes” (e.g. safety, congestion, economic development, environmental protection, etc.) are identified and discussed. It provides an opportunity to resolve potential conflicts in priorities (e.g. “how can we

expand our transportation system but at the same time protect our quality of life”) and to examine hypothetical changes in the communities assumptions regarding land use, transportation and funding through Scenario Planning<sup>3</sup>). After this visioning process takes place, the themes are distilled into a draft Vision Statement.

Having data on the state of the transportation system during the visioning process is always helpful. Data can inform the visioning process by making the community aware of how various aspects of the transportation system are performing well and which are not. Data will also be needed to assist in the development of goals, objectives and measures of effectiveness.

The development of draft goals come next, as they are crafted to address the themes of the Vision Statement. Whereas a theme in a Vision Statement is general in nature (e.g. “*we want a safe transportation system*”), a goal is more focused in terms of specifying a desired aspect of the theme (e.g. “*Our goal is to increase the safety of pedestrians*”).

Draft objectives are then developed to help meet the goals by providing more details. The objectives (with associated measures of effectiveness) are the key components for providing a basis for developing transportation solutions for achieving a successful CTP/MTP. If a goal is to increase the safety of pedestrians, the objective is where we articulate:

- What aspect of pedestrian safety are we concerned about?
- How do we define success?
- How will we measure success?
- When do we want to have success?

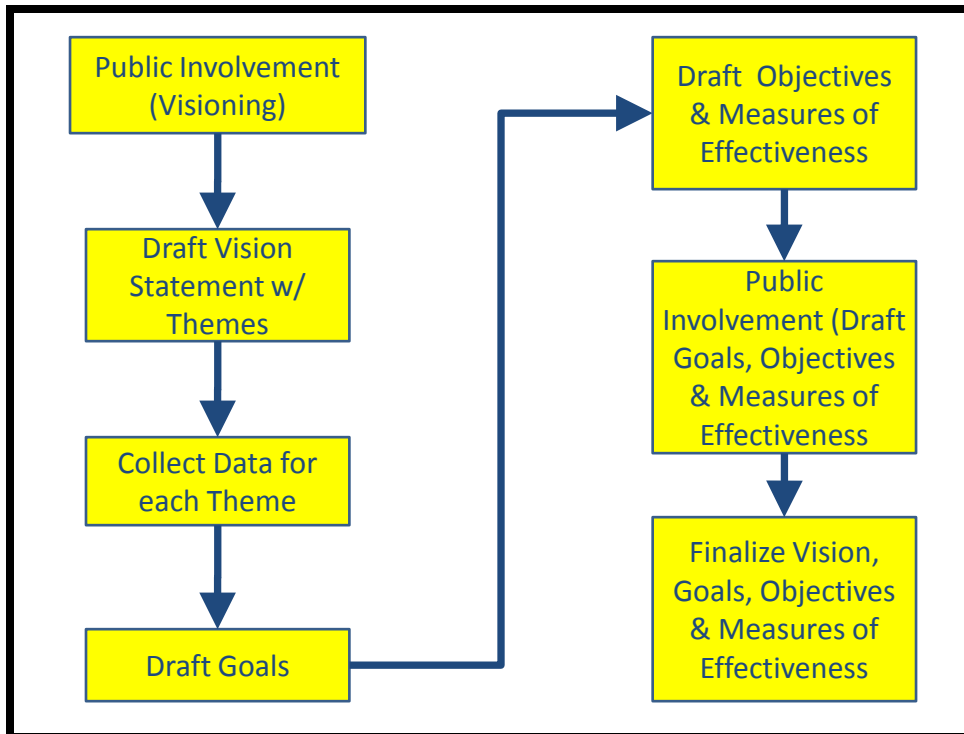
Once draft goals & objectives have been established, the community should be re-engaged to obtain their feedback. Did we accurately capture their concerns coming out of the visioning process? Have we articulated the proper amount of desired improvement for each of the objectives? Are we going to be able to track progress towards meeting our success criteria?

After the community has weighed in on the draft goals, objectives and measures of effectiveness, they are refined and then finalized.

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<sup>3</sup> *Scenario planning is an analytical tool that can help a community prepare for what lies ahead. Scenario planning provides a framework for developing a shared vision for the future by analyzing various forces (e.g., health, transportation, economic, environmental, land use, etc.) that affect growth. The hallmark of scenario planning is identifying land use patterns as variables (rather than static inputs) that could affect transportation networks, investments, and operations. Other variables might include demographic, economic, political, and environmental trends. Considering and analyzing alternative possibilities for each variable helps stakeholders understand how their community might look and function in the future. The ultimate outcome is a shared future vision that provides a framework for transportation priorities, goals, recommendations, and investments.*

*A defining characteristic of successful public sector scenario planning is that it actively involves the public, the business community, and elected officials on a broad scale, educating them about growth trends and trade-offs, and incorporating their values and feedback into future plans.*



### What about CTP/MTP Updates?

When a community needs to update their CTP/MTP, the update provides a great opportunity to assess what progress the community has made towards meeting their goals. When doing a CTP/MTP update, reviewing the last vision statement, goals and objectives would be an excellent exercise to go through at the initial meeting. Opportunities may include:

- Verifying that the original information is still valid (e.g. *“it’s been five years and we’re making steady progress towards achieving our goals so we don’t need to change anything now”*);
- Changing a goal (e.g. *“there’s a new issue that we want to address in our CTP/MTP”*);
- Changing an objective (e.g. *“we now want to have an objective related to transit security”*);
- Changing a measure of effectiveness (e.g. *“we thought this measure of effectiveness would be helpful but it’s not giving us information as to whether we’re making progress towards our goal”*);
- Changing a performance target (e.g. *“we originally wanted Level of Service “C” on all of our roads but that’s an unrealistic expectation for the main streets in our Central Business District”*);
- Changing a time target (e.g. *we thought this would take 25 years to achieve but we now think we can get it done sooner”*).

## Part 2: The Application

Part 1 discussed the background and the process for developing Vision Statements, Goals, Objectives & Measures of Effectiveness. Part 2 now applies these concepts through an example and discussion format.

### What are some Common Themes Found in Vision Statements?

As CTPs/MTPs have been developed over the past few years, a number of themes have been mentioned:

- [Congestion](#);
- [Safety](#);
- [Well-maintained](#);
- [Economic development](#);
- [Connectivity](#);
- [Accessible](#);
- [Efficiency](#);
- [Integrated/Multi-modal](#);
- [Mobility](#);
- [Security](#);
- [Sustainability](#);
- [Environmentally-responsible](#);
- [Quality of Life/Livability/Context Sensitivity](#); and
- [Cost-effective](#).

It's likely that during the visioning process, several of these themes will make it into the community's Vision Statement.

### What if a Theme is “Congestion”?

#### Crafting a Congestion Goal

Historically, the transportation planning process has primarily focused on congestion. CTPs/MTPs have typically resulted in desired projects to address the future demand (predicted traffic volumes) on the roadway network. It's acceptable and appropriate to establish an overall goal to address congestion. Focusing congestion on individual parts of the transportation system can be accomplished through objectives.

Sample Goal: *“Provide an uncongested transportation system” or “Reduce congestion on the transportation system.”*

#### Crafting Congestion Objectives

When crafting objectives for a congestion goal, data and specifics are introduced. To help identify appropriate congestion-related objectives, consider asking the community these questions:

- How do you define congestion?
- What mode(s) are you particularly interested in addressing congestion?
- Is there quantitative data suggesting a congestion problem?
- Is there qualitative data suggesting a congestion problem?

- How can you address your congestion problems? Think about supply vs. demand, with supply being the physical transportation system and demand being the land use that will generate predicted traffic?
- How do you want to address your congestion problems (supply, demand or both)?
- What measures of effectiveness will you use to address your congestion problem?
- What level of performance improvement do you want to achieve for your congestion problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their congestion goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success (is it realistic?) and be able to identify when success is desired.

Following is an example of how an objective can be crafted for congestion. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1 (reiterated below), the community can craft appropriate congestion-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

**Example 1:**

Let's assume the community is using a model to predict traffic volumes and that the model has an output of Volume to Capacity (V/C) ratio. This can provide the "measure of effectiveness" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [V/C ratio] + [all roads] by [time]**

Let's then assume that the community wants to have no roads that exceed a V/C ratio of 1.0. This provides the "verb" and the "performance target" parts of the objective.

**[Achieve] + [V/C ratio] + [1.0 or less] + [all roads] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[Achieve] + [V/C ratio] + [1.0 or less] + [all roads] by [2035]**

This results in an objective of:

*"Achieve a V/C ratio of 1.0 or less for all roads by 2035"*

Variations (depending on what's important to the community):

- Focus the objective on a different mode (e.g. transit);
- Establish different performance targets for different geographic areas (e.g. maybe the community will accept worse travel conditions in downtown areas vs. rural areas);

- Establish different performance targets for different facility types (e.g. maybe the community wants better operating conditions on the Interstate system vs. local roads);
- Use a different measure of effectiveness (e.g. maybe the community has data on speed or level of service);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Safety”?

### Crafting a Safety Goal

If a theme from the Vision Statement is safety, chances are, the community is concerned about safety for all parts of their transportation system. Even if there’s a particular safety problem, they’re not likely to say “we’re concerned about this—but not that”. Therefore, it’s acceptable and appropriate to establish an overall goal to provide a safe transportation system. Focusing safety on individual parts of the transportation system can be accomplished through objectives.

Sample Goal: “*Provide a safe transportation system.*”

### Crafting Safety Objectives

When crafting objectives for a safety-related goal, data and specifics are introduced. To help identify appropriate safety-related objectives, consider asking the community these questions:

- What mode(s) are you particularly interested in achieving better safety?
- Is there quantitative data suggesting a safety problem for a particular mode, facility, location, crash type, etc.?
- Is there qualitative data suggesting a safety problem for a particular mode, facility, location, crash type, etc.?
- How can you address your safety problems (think about the “4 E’s”-- engineering, enforcement, education & emergency response)?
- How do you want to address your quantitative safety problems (which of the “4 E’s”)?
- What measure of effectiveness will you use to address your safety problem?
- What level of performance improvement do you want to achieve for your safety problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their safety goal. They’ll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for safety. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate safety-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

**Example 1:**

If a community has crash data suggesting a safety problem, then the crash data can be used in the format above to craft a safety objective.

Let's assume the crash data shows one road ("Road X") within the county that has two Critical Crash Rates<sup>4</sup> (CCR) above the statewide average. This can provide the "measure of effectiveness" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [critical crash rates] + [Road X] by [time]**

Let's then assume that the community wants to have no CCRs above the state-wide average for Road X. This provides the "verb" and the "performance target" parts of the objective.

**[Reduce] + [all] + [critical crash rates] + [Road X] [to the statewide average] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[Reduce] + [all] + [critical crash rates] + [Road X] [to the state-wide average] by [2035]**

This results in an objective of:

*"Reduce all critical crash rates for Road X to the state-wide average by 2035"*

Variations (depending on what's important to the community):

- Focus the objective on a certain facility type with CCRs above the state-wide average (e.g. maybe the community wants to focus on Strategic Highway Corridors);
- Focus the objective on a geographic location with CCRs above the state-wide average (e.g. maybe the community wants to focus on areas around schools and parks);
- Change the performance target number of locations with CCRs above the statewide average (e.g. maybe the community wants to focus on some—but not all of—the safety problems);
- Change the performance target (maybe the community wants CCRs lower than the state-wide average);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

**Example 2:**

A community can still establish a safety objective without a CCR indicating a safety problem. This can be accomplished by qualitative objectives. Just because there isn't an existing crash problem doesn't mean that safety can't be important to the community or that the community can't do anything to avoid crashes in the future. When there's not crash data showing a problem, then a strategy for keeping crashes from occurring is to reduce the exposure. For example, reducing exposure for bicyclists and pedestrians can be accomplished by providing separation between the bicyclist or pedestrian and the motor vehicle. This can be implemented by the provision of in-street bike accommodations such as wide outside curb lanes or striped bike lanes or by off-street bike accommodations such as greenways and other off-street trails. For pedestrians, provision of sidewalks, crosswalks or other pedestrian-related facilities can help a community reach their safety objective. Therefore, a community could begin crafting a bicycle or pedestrian safety objective as follows:

<sup>4</sup> [http://www.ncdot.org/doh/preconstruct/traffic/teppi/Topics/T-52/T-52\\_ss.pdf](http://www.ncdot.org/doh/preconstruct/traffic/teppi/Topics/T-52/T-52_ss.pdf)



**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

Let's assume a community has data for the number of miles of bicycle trails within the county. This gives us the "transportation facility" (bicycle trails) and the measure of effectiveness (miles). The objective then starts to be filled out as so:

**[verb] + [performance target] + [miles of] + [bicycle trails within the county] by [time]**

The verb likely will depend on whether the community wants more or less. Let's then assume that the community wants more bicycle trails. Appropriate verbs could be "achieve" "add" or "increase".

**[achieve an increase] + [performance target] + [miles of] + [bicycle trails within the county] by [time]**

The performance target will be community-specific. How much improvement is desired? Is the level of desired improvement realistic in terms of other priorities and funding? Is the level of desired improvement achievable? Let's assume the community believes it's desirable to add 10 additional miles of greenways by their plan horizon. This information provides the last pieces to crafting the objective.

**[achieve an increase] + [20] + [miles of] + [bicycle trails within the county] by [2030]**

Resulting in:

*"Achieve an increase of 20 miles of new bicycle trails within the county by 2030."*

Variations (depending on what's important to the community):

- Focus on a different amount of new facility (maybe the community wants more or less than 20 miles of new bicycle trails);
- Focus on a different type of transportation facility (maybe the community wants to focus on sidewalks instead of trails);
- Specify a certain percentage of roads that have bike facilities (maybe the community wants to express the desired improvement in terms of a percentage increase rather than a specific amount);
- Specify certain facilities between two areas (e.g. residential and schools or hotels and tourist destinations in the planning area);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if the Theme is "Well-maintained"?

### Crafting a Well-maintained Goal

To have a good transportation system, a community must consider all aspects of what makes for good transportation—this includes the physical condition of the facilities and how this condition contributes to the operation of the transportation system. A bumpy road or a weight-posted bridge detracts from the effectiveness of a transportation system. A community can choose to—and should—engage in this discussion (besides, the NCGS specifically directs CTPs to "*consider...operating strategies*" and the FHWA regulations (23 CFR 450.322 (f)(5) require "*...Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure...*"). Think back to the example in Part 1 that lists the NCDOT goals. One of them is "*Make our infrastructure last longer*". Whether the theme is articulated as "preservation", "maintenance", "long-lasting infrastructure",

“preserve our investment in the transportation assets” or “state of good repair”, the concept relates to taking care of the transportation system.

If a theme from the Vision Statement is a well-maintained transportation system, chances are, the community is concerned about all parts of their transportation system being in good condition. Even if there’s a particular maintenance problem, they’re not likely to say “we’re concerned about this—but not that”. Therefore, it’s acceptable and appropriate to establish an overall goal to provide a well-maintained transportation system. Focusing maintenance and preservation efforts on individual parts of the transportation system can be accomplished through objectives.

Sample Goal: *“Provide a well-maintained transportation system.”*

### **Crafting Maintenance Objectives**

When crafting objectives for a maintenance-related goal, data and specifics are introduced. To help identify appropriate maintenance-related objectives, consider asking the community these questions:

- What mode(s) are you particularly interested in achieving better maintenance conditions?
- Is there quantitative data suggesting a maintenance problem for a particular mode, facility, location, crash type, etc.?
- Is there qualitative data suggesting a maintenance problem for a particular mode, facility, location, crash type, etc.?
- How can you address your maintenance problems?
- What measure of effectiveness will you use to address your maintenance problems?
- What level of performance improvement do you want to achieve for your maintenance problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their maintenance goal. They’ll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following is an example of how an objective can be crafted for maintenance. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate maintenance-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

### Example 1:

If a community has quantitative data suggesting a bridge condition problem, then the data can be used in the format above to craft a maintenance objective.

NCDOT currently maintains a “Dashboard for Infrastructure Health” (Bridge Health Index) for all counties. This information is tracked annually. This can provide the “measure of effectiveness” and the “transportation facility” parts of the objective.

**[verb] + [performance target] + [bridge health index] + [bridges in the county] by [time]**

Let’s then assume that the community’s bridge health index is below the state-wide average and that the community wants to improve the conditions of their bridges to a point where it’s the same as the state-wide average. This provides the “verb” and the “performance target” parts of the objective.

**[improve] + [bridge health index] + [bridges in the county] [to the statewide average] by [time]**

Finally, the community determines when this objective should be completed. Let’s assume it’s the horizon year of the CTP and that year is 2035. This provides the “time” part of the objective.

**[improve] + [bridge health index] + [bridges in the county] [to the statewide average] by [2035]**

This results in an objective of:

*“Improve the bridge health index for all bridges in the county to the statewide average by 2035”*

Variations (depending on what’s important to the community):

- Focus the objective on a different maintenance issue (e.g. pavement condition);
- Focus the objective on a subset (e.g. only bridges on the state highway system, only pavement condition on the Interstate System, only roadside features within city limits);
- Change the measure of effectiveness (e.g. for bridges, the community could use “bridge sufficiency ratings”);
- Change the measure of effectiveness tracking period (e.g. a multi-year average rather than an annual average);
- Change the performance target (maybe the community wants simply to maintain their current performance and just not let it get worse);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Economic Development”?

### Crafting an Economic Development Goal

Most (if not all) communities have a vision for how they want their communities to evolve and prosper. Often, a desirable outcome of a transportation planning process is the facilitation of economic development. However, provision of transportation facilities rarely is the sole cause of economic development. Transportation infrastructure, other public infrastructure (e.g. water, sewer, schools) and other considerations (e.g. tax rates, available workforce, available land and/or buildings, real estate values) collectively help determine how and where a community will grow. Provision of transportation infrastructure can facilitate the changing of land uses (e.g. paving an existing dirt road can make the adjacent properties more likely to support greater densities and/or intensities of use) which can assist economic development.

If a theme from the Vision Statement is economic development, the wording of the goal should not be worded in such a manner that economic development is solely dependent upon the transportation system. Rather, the goal should be grounded in transportation and how transportation can play a role in economic development. By focusing on the transportation system, this approach avoids defining a goal so broad that it would require consideration of non-transportation solutions for promoting economic development when the CTP/MTP is only focusing on transportation issues.

It's acceptable and appropriate to establish an overall goal to provide a transportation system that supports/encourages/contributes to economic development in the community. How this can be accomplished can be determined through objectives.

Sample Goal: *"Provide a transportation system that supports economic development opportunities."*

### **Crafting Economic Development Objectives**

When crafting objectives for an economic development goal, data and specifics are introduced. To help identify appropriate economic development-related objectives, consider asking the community these questions:

- How do you define economic development?
- How do you believe transportation plays a role in facilitating economic development?
- Is there quantitative data suggesting an economic development problem?
- Is there qualitative data suggesting an economic development problem?
- What measure of effectiveness will you use to address your economic development problems?
- What level of performance improvement do you want to achieve for your economic development problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their economic development goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for economic development. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate economic development-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

### Example 1:

Depending upon how a community defines the relationship between transportation infrastructure and economic development, it may be possible for a community to use a measure of effectiveness from another theme for economic development as well. For example, if the community believes that congestion plays a role in economic development, then the community could utilize their congestion objective(s) and measure of effectiveness as a surrogate for economic development. Therefore, if the community has a congestion-related objective of “Achieve a V/C ratio of 1.0 or less for all roads by 2035”, this objective could serve the economic development goal as well as the congestion goal.

### Example 2:

Let’s assume that a community believes there’s a relationship between a community’s “walkability” and economic development (let’s also assume that the community doesn’t have another objective (from another theme) that addresses this issue). While “walkability” is primarily influenced by where land use is located, the provision of transportation facilities for pedestrians can be addressed in a CTP/MTP. If a community has quantitative data that shows an absence of pedestrian facilities in areas where they can enhance the community’s “walkability” (e.g. there are sidewalk gaps on roads within ¼ mile of schools), then the data can be used in the format above to craft an economic development objective. This can provide the “measure of effectiveness” and the “transportation facility” parts of the objective.

**[verb] + [performance target] + [sidewalk gaps] + [roads within ¼ mile of schools] by [time]**

Let’s then assume that the community wants to have no sidewalk gaps on roads within ¼ mile of schools. This provides the “verb” and the “performance target” parts of the objective.

**[Eliminate] + [all] + [sidewalk gaps] + [roads within ¼ mile of schools] by [time]**

Finally, the community determines when this objective should be completed. Let’s assume it’s the horizon year of the CTP and that year is 2035. This provides the “time” part of the objective.

**[Eliminate] + [all] + [sidewalk gaps] + [roads within ¼ mile of schools] by [2035]**

This results in an objective of:

*“Eliminate all sidewalk gaps on roads within ¼ mile of schools by 2035”*

Variations (depending on what’s important to the community):

- Focus the objective on a different transportation facility relationship to economic development (e.g. maybe the community desires to have no bridges with weight restrictions that cause freight to travel longer distances);
- Change the verb (e.g. maybe it’s not realistic to eliminate a deficiency, so a different verb could be “reduce” or “maintain”);
- Change the performance target (maybe the community wants a certain percentage of roads to not have sidewalk gaps);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Connectivity”?

### Crafting a Connectivity Goal

Connectivity suggests connecting two or more “things”. For example, connecting several transportation facilities or connecting several geographic areas. When considering inclusion of

connectivity as a CTP/MTP goal, careful consideration should be given as to whether connectivity is really a separate theme or is it really a solution to a different problem. For example, it will be a rare situation where connectivity is a root problem. We don't typically decide to connect something just because we can. Usually there is a different underlying problem and connectivity is a method of addressing that problem.

For example, let's assume there's a river that bisects a community and that there's only a 2-lane bridge that crosses the river. The community wants another river crossing, so they articulate this as a goal to "increase connectivity". But why does the community really want another river crossing? Possibly, the existing bridge is congested and the community thinks another river crossing would help alleviate congestion. If this is the case, then the appropriate theme is congestion—not connectivity. Perhaps the community is concerned about emergency response times and having only one river crossing means the emergency response vehicles must go out of their way (over the bridge) to get to some parts of the community. If this is the case, then the appropriate theme might be safety or even economic development.

Should the community conclude that connectivity should be a goal, then it's acceptable and appropriate to establish an overall goal to provide a transportation system that supports/encourages a connected transportation system. How this can be accomplished can be determined through objectives.

Sample Goal: *"Provide a transportation system that improves connectivity"*.

### **Crafting Connectivity Objectives**

When crafting objectives for a connectivity goal, data and specifics are introduced. To help identify appropriate connectivity-related objectives, consider asking the community these questions:

- How do you define connectivity?
- Is connectivity really a root problem or is it a symptom of a different theme?
- Is there quantitative data suggesting a connectivity problem?
- Is there qualitative data suggesting a connectivity problem?
- What measure of effectiveness will you use to address your connectivity problems?
- Are there measures of effectiveness from other themes that could serve as surrogates for your connectivity objectives?
- What level of performance improvement do you want to achieve for your connectivity problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their connectivity goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for a connectivity goal. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each

community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate connectivity-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

**Example 1:**

Depending upon how a community defines connectivity, it may be possible for a community to use a measure of effectiveness from another theme for connectivity as well. For example, if the community has a measure of effectiveness of vehicle miles traveled (VMT) for measuring efficiency, then it's possible that this same VMT measure of effectiveness could be utilized for connectivity as well (maybe VMT is reduced if certain modes are connected). Therefore, if the community has an efficiency objective of “*Reduce area-wide VMT by 5% by 2035*”, this objective could serve the connectivity goal as well as the efficiency goal.

**Example 2:**

Let's assume that a community defines connectivity in terms of connecting two or more modes of transportation. Let's also assume the community doesn't have another objective (from another theme) addressing this issue. This can provide the “verb” and the “transportation facility” parts of the objective.

**[connect] + [performance target] + [measure of effectiveness] + [bus system & passenger rail system] by [time]**

In this example, the “verb” (connect) also serves as the “performance target” and as the measure of effectiveness, because success is now measured by whether a connection is established.

**[connect] + [performance target] + [measure of effectiveness] + [bus system & passenger rail system] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the “time” part of the objective.

**[connect] + [performance target] + [measure of effectiveness] + [bus system & passenger rail system] by [2035]**

This results in an objective of:

*“Connect the bus system with the passenger rail system by 2035”*

Variations (depending on what's important to the community):

- Focus the objective on connecting different modes (e.g. bicycles & transit);
- Focus the objective on connecting geographic areas (e.g. the mainland to an island);
- Change the performance target (e.g. establish more than one connection);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Accessible”?

### Crafting an Accessible Goal

When considering inclusion of accessible as a CTP/MTP goal, the community needs to be able to articulate what they mean by accessible. For example, accessible could be defined as

providing additional access points to the transportation system (e.g. a new interchange on the Interstate system). Caution should be used if this is how the community believes accessible should be defined. As in the discussion regarding connectivity, usually there is some other root cause (e.g. congestion on nearby roads) that suggests a problem, and the solution includes some element of accessibility.

Some communities regard accessible as the ability of transportation users to access the transportation system. For example, a community might desire (as part of their Vision Statement) to remove obstacles that users with disabilities have in accessing the transportation system. If this is how the community defines accessible, then it's acceptable and appropriate to establish an overall goal to provide a transportation system that is accessible to all users. How this can be accomplished can be determined through objectives.

Sample Goal: *"Provide a transportation system that is accessible to all users"*.

### **Crafting Accessible Objectives**

When crafting objectives for an accessible goal, data and specifics are introduced. To help identify appropriate accessible-related objectives, consider asking the community these questions:

- How do you define accessible?
- Is accessibility really a root problem or is it a symptom of a different theme?
- Is accessibility really a root problem or is it a solution to a different problem?
- Is there quantitative data suggesting an accessible problem?
- Is there qualitative data suggesting an accessible problem?
- What measure of effectiveness will you use to address your accessible problems?
- Are there measures of effectiveness from other themes that could serve as surrogates for your accessible objectives?
- What level of performance improvement do you want to achieve for your accessible problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their accessible goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for an accessible goal. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate accessible-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**



### Example 1:

Let's assume that a community defines accessible in terms of obstacles that prevent or hinder users of the transportation system. Let's also assume that the objective will focus on existing sidewalks that do not have ramps. This can provide the "measure of effectiveness" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [missing ramps] + [existing sidewalks] by [time]**

Now let's assume that there are 100 locations where sidewalk ramps are missing. Let's also assume that the community believes it's realistic to achieve a 50% reduction in the amount of missing ramps. This now provides the "verb" and the "performance target".

**[reduce] + [50%] + [missing ramps] + [existing sidewalks] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[reduce] + [50%] + [missing ramps] + [existing sidewalks] by [2035]**

This results in an objective of:

*"Reduce by 50% the number of missing sidewalk ramps on existing sidewalks by 2035"*

Variations (depending on what's important to the community):

- Focus the objective on making a different mode more accessible;
- Change the measure of effectiveness (e.g. audible crosswalk indicators);
- Focus the objective on connecting geographic areas (e.g. the mainland to an island);
- Change the performance target (e.g. remove all obstacles);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is "Efficiency"?

### Crafting an Efficiency Goal

When considering inclusion of efficiency as a CTP/MTP goal, the community needs to be able to articulate what they mean by efficient. For example, efficiency could relate to how consistent the transit system adheres to schedules. It could relate to how many miles of travel occurs over the transportation system. Regardless of how a community defines efficiency, it's acceptable and appropriate to establish an overall goal to provide a transportation system that is efficient. How this can be accomplished can be determined through objectives.

Sample Goal: *"Provide an efficient transportation system"*.

### Crafting Efficiency Objectives

When crafting objectives for an efficiency goal, data and specifics are introduced. To help identify appropriate efficiency-related objectives, consider asking the community these questions:

- How do you define efficiency?
- Is there quantitative data suggesting an efficiency problem?
- Is there qualitative data suggesting an efficiency problem?
- What measure of effectiveness will you use to address your efficiency problems?

- Are there measures of effectiveness from other themes that could serve as surrogates for your efficiency objectives?
- What level of performance improvement do you want to achieve for your efficiency problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness(s)?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their efficiency goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for an efficiency goal. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate efficiency-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

**Example 1:**

Let's assume that a community defines efficiency in terms of the amount of vehicular travel. Let's also assume that the community uses a transportation model that has an output of vehicle miles traveled (VMT). This can provide the "measure of effectiveness" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [total VMT] + [county-wide transportation system] by [time]**

Now let's assume that the community wants to achieve a 5% (assuming this amount is realistic and achievable) reduction in the VMT. This now provides the "verb" and the "performance target".

**[reduce] + [5%] + [total VMT] + [county-wide transportation system] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[reduce] + [5%] + [total VMT] + [county-wide transportation system] by [2035]**

This results in an objective of:

*"Reduce by 5% the total VMT for the county-wide transportation system by 2035"*

Variations (depending on what's important to the community):

- Focus the objective on making a specific mode more efficient (e.g. transit);
- Change the measure of effectiveness (e.g. travel-time reliability);
- Change the performance target (e.g. reduce by a different percentage or by a real amount);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Integrated/Multi-modal”?

### Crafting an Integrated/Multi-modal Goal

If the Vision Statement includes a theme of integrated/multi-modal, then it’s acceptable and appropriate to establish an overall goal to provide an integrated and/or multi-modal transportation system. How this can be accomplished can be determined through objectives.

Sample Goal: *“Provide an integrated, multi-modal transportation system”*.

### Crafting Integrated/Multi-modal Objectives

When crafting objectives for an integrated/multi-modal goal, data and specifics are introduced. To help identify appropriate Integrated/multi-modal-related objectives, consider asking the community these questions:

- How do you define integrated/multi-modal?
- Is integrated/multi-modal really a root problem or is it a symptom of a different theme?
- Is there quantitative data suggesting an integrated/multi-modal problem?
- Is there qualitative data suggesting an integrated/multi-modal problem?
- What measure of effectiveness will you use to address your integrated/multi-modal problems?
- Are there measures of effectiveness from other themes that could serve as surrogates for your integrated/multi-modal objectives?
- What level of performance improvement do you want to achieve for your integrated/multi-modal problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their integrated/multi-modal goal. They’ll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for an integrated/multi-modal goal. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate integrated/multi-modal-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

### Example 1:

Let's assume that a community desires to integrate pedestrian accommodations on roads within ½ mile of public parks and recreation areas. This can provide the “verb” and the “transportation facility” parts of the objective.

**[verb] + [performance target] + [sidewalks] + [roads within ½ mile of public parks and recreation areas] by [time]**

Let's then assume that the community wants to implement this desire whenever the roads are either newly constructed, widened, or resurfaced. This now provides the verb and the “performance target”.

**[Provide] + [sidewalks] + [when new construction, widening or resurfacing takes place] + [roads within ½ mile of public parks and recreation areas] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the “time” part of the objective.

**[Provide] + [sidewalks] + [when new construction, widening or resurfacing takes place] + [roads within ½ mile of public parks and recreation areas] by [2035]**

This results in an objective of:

*“Provide sidewalks with all new construction, widening and resurfacing projects within ½ mile of public parks and recreation areas by 2035”*

Variations (depending on what's important to the community):

- Focus the objective on integrating different modes (e.g. bicycles or transit);
- Focus the objective on stand-alone projects (i.e. not just when other work is being done);
- Change the transportation facility (e.g. on all roads instead of a subset);
- Change the performance target (e.g. establish a number or percentage rather than all);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Mobility”?

### Crafting a Mobility Goal

When considering inclusion of mobility as a CTP/MTP goal, the community needs to be able to articulate what they mean by mobility. For example, mobility generally means the movement of people and goods, but the community could have a different understanding or focus. Regardless of how a community defines mobility, it's acceptable and appropriate to establish an overall goal to improve a transportation system's mobility. How this can be accomplished can be determined through objectives.

Sample Goal: *“Enhance the mobility of the transportation system”*.

### Crafting Mobility Objectives

When crafting objectives for a mobility goal, data and specifics are introduced. To help identify appropriate mobility-related objectives, consider asking the community these questions:

- How do you define mobility?
- Is there quantitative data suggesting a mobility problem?
- Is there qualitative data suggesting a mobility problem?
- What measure of effectiveness will you use to address your mobility problems?

- Are there measures of effectiveness from other themes that could serve as surrogates for your mobility objectives?
- What level of performance improvement do you want to achieve for your mobility problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their mobility goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for a mobility goal. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate mobility-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

**Example 1:**

Depending upon how a community defines mobility, it may be possible for a community to use a measure of effectiveness from another theme for mobility as well. For example, if the community has a measure of effectiveness of Volume to Capacity (V/C) ratio for measuring congestion, then it's possible that this same V/C measure of effectiveness could be utilized for mobility as well. Therefore, if the community has a congestion objective of "Achieve a V/C ratio of 1.0 or less for all roads by 2035", this objective could serve the mobility goal as well as the congestion goal.

**Example 2:**

Let's assume that a community defines mobility in terms of movement of people and goods. Let's also assume that the community uses a transportation model that has an output of Level of Service (LOS). This can provide the "measure of effectiveness" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [LOS] + [all roads] by [time]**

Now let's assume that the community defines acceptable mobility as LOS "D" or better (assuming this amount is realistic and achievable). This now provides the "verb" and the "performance target".

**[achieve] + [D] + [LOS] + [all roads] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[achieve] + [D] + [LOS] + [all roads] by [2035]**

This results in an objective of:  
 "Achieve LOS "D" or better on all roads by 2035"

Variations (depending on what's important to the community):

- Focus the objective on a different mode (e.g. transit);
- Establish different performance targets for different geographic areas (e.g. maybe the community will accept worse travel conditions in downtown areas vs. rural areas);
- Establish different performance targets for different facility types (e.g. maybe the community wants better operating conditions on the Interstate system vs. local roads);
- Use a different measure of effectiveness (e.g. maybe the community has data on speed or level of service);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is “Security”?

### Crafting a Security Goal

When considering inclusion of security as a CTP/MTP goal, the community needs to be able to articulate what they mean by secure. For example, security could relate to how a community is able to respond to natural disasters, man-made incidents or both. Regardless of how a community defines security, it's acceptable and appropriate to establish an overall goal to provide a transportation system that is secure. How this can be accomplished can be determined through objectives.

Sample Goal: “*Provide a secure transportation system*”.

### Crafting Security Objectives

When crafting objectives for a security goal, data and specifics are introduced. To help identify appropriate security-related objectives, consider asking the community these questions:

- How do you define security?
- Is there quantitative data suggesting a security problem?
- Is there qualitative data suggesting a security problem?
- What measure of effectiveness will you use to address your security problems?
- Are there measures of effectiveness from other themes that could serve as surrogates for your security objectives?
- What level of performance improvement do you want to achieve for your security problems?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their security goal. They'll have data, be able to specifically define what problems to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted for a security goal. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each

community will have their own problems and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate security-related objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

#### Example 1:

Let's assume that a community defines security in terms of emergency evacuation associated with a hurricane. Let's also assume that this objective will relate to the transportation component of hurricane evacuation (it's important to understand that a successful evacuation can involve actions beyond just transportation infrastructure (e.g. emergency management communications, adequate fuel stations along the evacuation route). Let's also assume that the community has access to a model that predicts hurricane evacuation clearance times. This can provide the "measure of effectiveness" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [evacuation clearance based on 85% occupancy] + [evacuation route "Road X" to the county line] by [time]**

Now let's assume that the community wants to achieve a 2-hour reduction of the projected clearance time (assuming this amount is realistic and achievable). This now provides the "verb" and the "performance target".

**[reduce] + [2 hours] + [evacuation clearance based on 85% occupancy] + [evacuation route "Road X" to the county line] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[reduce] + [5%] + [total VMT] + [county-wide transportation system] by [2035]**

This results in an objective of:

*"Reduce by 5% the evacuation clearance time for Road X to the county line by 2035"*

Variations (depending on what's important to the community):

- Focus the objective on the clearance time to a different location (e.g. I-95);
- Change the measure of effectiveness (e.g. a different occupancy level);
- Change the performance target (e.g. "meet the 18-hour standard");
- Focus the objective on security from man-made incidents (e.g. terrorism);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is "Sustainability"?

### Crafting Sustainability Goals

When considering inclusion of sustainability as a CTP/MTP goal, the community needs to be able to articulate what they mean by sustainable. For example, it could be defined in the context of projects (are the projects themselves sustainable) or in the context of decision-making (are we making decisions that lead to a sustainable transportation system. Regardless of how a community defines sustainability, it's acceptable and appropriate to establish an overall

goal to provide a transportation system that is sustainable. How this can be accomplished can be determined through objectives.

Sample Goals: *“Ensure a sustainable transportation system”* or *“Make transportation decisions that are sustainable.”*

### **Crafting Sustainability Objectives**

When crafting objectives for sustainability goals, data and specifics are introduced. To help identify appropriate such objectives, consider asking the community these questions:

- How do you define sustainability?
- What sustainability issues do you want to consider in your decision-making?
- What data do you have that will assist you in making your decisions?
- Is the data quantitative or qualitative?
- How will you use the data in your decision-making?
- What measure of effectiveness will you use to evaluate the effectiveness of your decision-making related to being sustainable?
- Will you have sustainability performance targets that you will strive to achieve?
- If so, what level of performance improvement do you want to achieve?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their sustainability goals. They'll have data, be able to specifically define what decision-making issues to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted that relates to sustainability. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own sustainability factors and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

#### **Example 1:**

Let's assume that a community defines sustainability in part by emphasizing fuels other than gasoline for vehicles. Let's also assume that the community desires to focus on providing stations for charging electric vehicles in a certain part of the community. This can provide the “measure of effectiveness” and the “transportation facility” parts of the objective.

**[verb] + [performance target] + [electric vehicle charging station] + [public parking garages] by [time]**

Now let's assume that the community wants to have these stations in all of their public parking garages (assuming this amount is realistic and achievable). This now provides the “verb” and the “performance target”.



**[provide] + [in all] + [electric vehicle charging station] + [public parking garages] by [time]**

Finally, the community determines when this objective should be completed. Let's assume it's the horizon year of the CTP and that year is 2035. This provides the "time" part of the objective.

**[provide] + [in all] + [electric vehicle charging station] + [public parking garages] by [2035]**

This results in an objective of:

*"Provide electric vehicle charging stations in all public parking garages by 2035"*

Variations (depending on what's important to the community):

- Focus the objective on a different aspect of sustainability (e.g. hydrogen fuel technology);
- Change the transportation facility location (e.g. in all municipalities);
- Change the performance target (e.g. at least two stations at each location);
- Change the date for success (maybe the community wants to achieve success before the planning horizon year).

## What if a Theme is "Environmentally-Responsible"?

### Crafting Environmentally-Responsible Goals

When considering inclusion of environmentally-responsible as a CTP/MTP goal, the community should understand the context. Being environmentally responsible (i.e. making transportation decisions considering the environmental impacts) speaks, in part, to *how* a community makes decisions. Therefore, rather than having a goal "to protect the environment" (which has implications far beyond just the transportation system), the community could have a goal to include the consideration of environmental impacts as a factor in project evaluation and selection. Therefore, an overall goal related to environmentally-responsible should be framed in the context of decision-making. How this can be accomplished can be determined through objectives.

Sample Goal: *"Consider environmental impacts during project evaluation and selection."*

### Crafting Environmentally-Responsible Objectives

When crafting objectives for environmentally-responsible goals, data and specifics are introduced. To help identify appropriate such objectives, consider asking the community these questions:

- What environmental issues do you want to consider in your decision-making?
- What data do you have that will assist you in making your decisions?
- Is the data quantitative or qualitative?
- How will you use the data in your decision-making?
- What measure of effectiveness will you use to evaluate the effectiveness of your decision-making related to being environmentally-responsible?
- Will you have environmental performance targets that you will strive to achieve?
- If so, what level of performance improvement do you want to achieve?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their environmentally-responsible goals. They'll have data, be able to specifically define what decision-making issues to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted that relates to environmentally-responsible. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own environmentally-responsible factors and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

#### **Example 1:**

Let's assume that a community desires to include environmentally-responsible as part of the decision-making on project evaluation and selection. This can provide the "verb" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [environmental impacts] + [all projects] by [time]**

As this objective relates to a part of the decision-making for projects, the "verb" should be one that is not absolute. Since "consider" is not an action-forcing verb, there is no "performance target" in this example.

**[consider] + [performance target] + [environmental impacts] + [all projects] by [time]**

Finally, the community determines when this objective should be completed. Since it's part of the decision-making for the plan, then the it should be completed when the plan is adopted. This provides the "time" part of the objective.

**[consider] + [performance target] + [environmental impacts] + [all projects] by [plan adoption]**

This results in an objective of:

*"Consider the environmental impacts of all projects during the evaluation and selection of projects by adoption of this plan"*

Variations (depending on what's important to the community):

- Change the transportation facility (e.g. just on roadway capacity projects);
- Change the range of environmental impacts (maybe the community wants to focus on several environmental impacts instead of "all").

## **What if a Theme is "Quality of Life/Livability/Context Sensitive"?**

### **Crafting Quality of Life/Livability/Context Sensitive Goals**

When considering inclusion of quality of life/livability/context sensitive as a CTP/MTP goal, the community should understand the context. Quality of life/livability/context sensitive is a subjective concept. It is also a much broader subject than just transportation. Rather than having a goal of "improving" or "maintaining" the community's quality of live/livability/context

sensitivity, the community could have a goal that relates to how proposed transportation projects will contribute to the community's quality of life/livability/context sensitivity. How this can be accomplished can be determined through objectives.

Sample Goal: *"Ensure all transportation projects positively impact the community's quality of life."*

### **Crafting Quality of Life/Livability/Context Sensitive Objectives**

When crafting objectives for quality of life/livability/context sensitive goals, data and specifics are introduced. To help identify appropriate such objectives, consider asking the community these questions:

- How do you define quality of life/livability/context sensitive?
- How does the transportation system affect your quality of life/livability/context sensitivity?
- What are the characteristics of your community's quality of life/livability/context sensitivity that can be affected by changes to your transportation system?
- Do you have data for these characteristics?
- Is the data quantitative or qualitative?
- How will you use the data in your decision-making?
- What measure of effectiveness will you use to evaluate the effectiveness of your decision-making related to quality of life/livability?
- Will you have quality of life/livability/context sensitivity performance targets that you will strive to achieve?
- If so, what level of performance improvement do you want to achieve?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?
- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their quality of life/livability/context sensitive goals. They'll have data, be able to specifically define what decision-making issues to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted that relates to quality of life/livability/context sensitivity. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own quality of life factors and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

#### **Example 1:**

Let's assume that a community desires to include quality of life as part of the decision-making on project evaluation and selection. This can provide the "verb" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [quality of life effects] + [all projects] by [time]**

As this objective relates to a part of the decision-making for projects, the “verb” should be one that is not absolute. Since “consider” is not an action-forcing verb, there is no “performance target” in this example.

**[consider] + [performance target] + [quality of life effects] + [all projects] by [time]**

Finally, the community determines when this objective should be completed. Since it’s part of the decision-making for the plan, then the it should be completed when the plan is adopted. This provides the “time” part of the objective.

**[consider] + [performance target] + [quality of life effects] + [all projects] by [plan adoption]**

This results in an objective of:

*“Consider quality of life effects for all projects during the evaluation and selection of projects by adoption of this plan”.*

Variations (depending on what’s important to the community):

- Change the transportation facility (e.g. the entire plan);
- Change the date for success (maybe the community wants to revisit project evaluation and selection during the subsequent environmental review process).

## What if a Theme is “Cost-effective”?

### Crafting Cost-Effective Goals

When considering inclusion of cost-effective as a CTP/MTP goal, the community needs to be able to articulate what they mean by cost-effective. For example, it could be defined in the context of projects (are the projects themselves cost-effective) or in the context of decision-making (are we making decisions that lead to a cost-effective transportation system).

Regardless of how a community defines cost-effective, it’s acceptable and appropriate to establish an overall goal to provide a transportation system that is cost-effective (related to project or decisions). How this can be accomplished can be determined through objectives.

Sample Goal: *“Ensure a cost-effective transportation system”* or *“Make transportation decisions that are cost-effective.”*

### Crafting Cost-Effective Objectives

When crafting objectives for cost-effective goals, data and specifics are introduced. To help identify appropriate such objectives, consider asking the community these questions:

- How do you define cost-effective?
- Will you consider Life Cycle Cost?
- Do you have data related to cost-effectiveness?
- Is the data quantitative or qualitative?
- How will you use the data in your decision-making?
- What measure of effectiveness will you use to evaluate the effectiveness of your decision-making related to cost-effectiveness?
- Will you have cost-effectiveness performance targets that you will strive to achieve?
- If so, what level of performance improvement do you want to achieve?
- Is the desired performance level realistic and achievable?
- Do you have the ability to track the measure of effectiveness?

- When do you want to achieve your performance improvement?

Based on the answers, the community can then start crafting objectives that will help achieve their cost-effective goals. They'll have data, be able to specifically define what decision-making issues to address, be able to discuss how much improvement is desired, be able to identify strategies for making improvements, be able to assess the chance of success and be able to identify when success is desired.

Following are examples of how an objective can be crafted that relates to cost-effective. Focus on the parts of the objective and how they are assembled—not on the actual wording, since each community will have their own cost-effective factors and their own performance targets and timeframes. Using the format from Part 1, the community can craft appropriate objectives.

**[verb] + [performance target] + [measure of effectiveness] + [transportation facility] by [time]**

**Example 1:**

Let's assume that a community desires to include Life Cycle Cost as part of the decision-making on project evaluation and selection. This can provide the "verb" and the "transportation facility" parts of the objective.

**[verb] + [performance target] + [Life Cycle Cost] + [all projects] by [time]**

As this objective relates to a part of the decision-making for projects, the "verb" should be one that is not absolute. Since "consider" is not an action-forcing verb, there is no "performance target" in this example.

**[consider] + [performance target] + [Life Cycle Cost] + [all projects] by [time]**

Finally, the community determines when this objective should be completed. Since it's part of the decision-making for the plan, then the it should be completed when the plan is adopted. This provides the "time" part of the objective.

**[consider] + [performance target] + [Life Cycle Cost] + [all projects] by [plan adoption]**

This results in an objective of:

*"Consider Life Cycle Cost of all projects during the evaluation and selection of projects by adoption of this plan".*

Variations (depending on what's important to the community):

- Focus the objective on a different aspect of cost-effective (e.g. just construction cost);
- Change the transportation facility (e.g. the entire plan);
- Change the date for success (maybe the community wants to revisit project evaluation and selection during the subsequent environmental review process).