

RESOURCE DATABASE GUIDE

This Database Guide identifies the training needs for each of the eight target audiences in the National Bicycle Safety Education Curriculum. (Refer to the *Introduction* document for background information on the eight target audience categories and the National Bicycle Safety Education Curriculum project in general.) A series of target audience matrices are provided below. Each target audience category contains information on the topics, sub-topics and subject areas that should be included in any training program designed for that audience. A priority of 1, 2 or 3 has been assigned to each subject area to assist the user in determining what content is critical and what could be considered optional. A subject given a priority of 1 should always be included in a training program for that audience. A subject with a 3 priority could be omitted if training time was limited.

How to Use the Matrices (Below) to Find a Resource in the Database that Meets Your Bicycle Safety Education Needs

Database entry number references are provided in brackets [_] at the sub-topic level in the matrices. These bracketed numbers identify resource entry numbers in the Resource Database that pertain the subject matter for the identified target audience. If no training resources were identified for a particular sub-topic, no resource catalog references are provided.

1. Find your target audience category in the matrix below.
2. Find the Topic and Sub-topic columns that meet your curriculum needs.
3. Write down the bracketed [_] database resource entry numbers from the appropriate Sub-topic column (for example, [36, 55]).
4. Link to the Resource Database from the Bicycle Safety Education Resource Center web page.
5. Type the database resource entry number(s) in the *Resource Entry Number* field and click *Submit*.
6. View the database results.

TARGET AUDIENCE: PRESCHOOL BICYCLISTS (Under 5 years)

NOTE: For children of this age group, all riding should be closely supervised by an adult.

TARGET AUDIENCE: PRESCHOOL BICYCLISTS (Under 5 years)			
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES
			Priority
1.0 Riding Skills	1.1 Learning to Ride [36, 55]	Developmental stages	
		Balancing	1
		Pedaling	1
		Riding in a straight line	1
		Stopping/braking	1
		Turning	1
		Riding with disabilities	3
	1.2 Basic Riding Skills [55]	Changing gears	
		Looking behind	
		Judging distance/speed	
		Recognizing hazards on the road surface	
		Dodging hazards	

TARGET AUDIENCE: PRESCHOOL BICYCLISTS (Under 5 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES	
			Priority		
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection [36]	What makes a good route?	2	Where you should and should not ride and why	
		Sidewalks	1	Watching out for cars in driveways Watching out for pedestrians Staying away from the street	
		Multi-use paths and trails	1	Using trails to practice and have fun Watching out for other bikes	
	2.2 Rules of the Road, Traffic Law, and Responsibilities	(not applicable)			
	2.3 Hazards and Risks [36, 55]	Why crashes happen	3	How little kids typically get hurt on their bikes	
		Risky behaviors	1	Avoiding risky behaviors Things you shouldn't do	
		Identifying hazards	2	Learning to look for things that could hurt you Cars going in and out of driveways Riding into the street from a driveway or sidewalk	
		Avoiding hazards	3	Staying away from cars with engines running	
	2.4 Traffic Operations and Intersections [55]	Children in traffic			
		Entering the roadway	1	Stopping at the end of a driveway Stopping at the end of the sidewalk	
		Making turns			
		Multi-use paths			
		Parking lots			
Getting through intersections		1	Crossing streets only with an adult		

TARGET AUDIENCE: PRESCHOOL BICYCLISTS (Under 5 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	2.5 Communications and Sharing the Road [55]	How drivers and bicyclists know what to do		
		How drivers and bicyclists can communicate with each other		
		Negotiating		
		Making your own decision		
		Conspicuity	1	Learning that it's hard for drivers to see kids
		Courtesy on and off road		
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do		
		Anticipating what bicyclists might do		

TARGET AUDIENCE: PRESCHOOL BICYCLISTS (Under 5 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
3.0 Equipment	3.1 About Your Bike [36, 55]	Picking the right bike	2	Getting a bike that fits
		Adjusting	3	Making sure the seat is the right height
		Equipment familiarization	2	Using your brakes to slow and stop Practicing stopping quickly and safely
		Maintaining		
		Repairing	3	Getting broken equipment fixed
	3.2 Essential Equipment [36, 55]	Helmet	1	Why helmets are important Riding with a helmet Making sure a helmet fits Wearing a helmet correctly
		Glasses		
Gloves				
4.0 All About Bicycling	4.1 Transportation [36]	Environmental impact		
		Parking/locking your bike		
		Clothing/hygiene		
	4.2 Recreation [36]	Touring and group rides		
		Off-road riding		
	4.3 Health and Fitness	Family fun	3	Asking your parents to go riding with you
Health benefits		2	Bicycling is good for you	

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
1.0 Riding Skills	1.1 Learning to Ride [7, 19 31, 39, 40, 43, 44, 47, 50, 52, 53, 57, 66]	Developmental stages		
		Balancing	1	Developing skills
		Pedaling	1	Pedaling smoothly Developing skills
		Riding in a straight line	1	Developing skills Riding straight when looking backwards
		Stopping/braking	1	Braking safely and effectively Using coaster brakes and hand brakes Developing skills
		Turning	1	Turning without falling Developing skills
		Riding with disabilities	3	Learning how people with disabilities can bike too How to use special equipment and options if needed
	1.2 Basic Riding Skills [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 50, 52, 53, 57, 66, 79, 80]	Changing gears	2	Using different kinds of shifters Pedaling when shifting gears Knowing when to shift gears
		Looking behind	1	When to look behind you The importance of looking behind you Looking behind you AND riding straight
		Judging distance/speed	1	Developing skills Crossing the street safely
		Riding with one hand	2	Balance and control Developing skills
		Recognizing hazards on the road surface	1	What can cause a fall Recognizing roadway surface hazards
		Dodging hazards	2	Dealing with roadway surface hazards

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT Priority		CONTENT OBJECTIVES
	1.3 Advanced Riding Skills [16, 19, 39, 47, 53, 80]	Crash avoidance/falling	2	How to execute emergency maneuvers How to control a fall
		Gear selection	2	Choosing and using the “right” gear When to change gears
		Group riding	3	Things to watch out for when riding with other people Calling out information to riders in front and behind
		Riding rules	3	Independent decision making Riding safely with friends Looking behind before changing position or turning Avoiding following too close behind another bike Letting people ahead know when you are going to pass them Watching out for others on trails/paths (e.g., young kids, dogs, in-line skaters)
		Weather	1	Riding on wet roads and trails Riding in the winter
		Windblast effect		
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection [16, 19, 39, 40, 43, 43, 57, 80]	What makes a good route?	1	Learning where it’s safe to ride
		Sidewalks	1	Riding carefully on sidewalks Watching out for cars in driveways Watching out for pedestrians What to do at intersections
		Neighborhood streets	1	Riding in the street Developing skills Riding with adults while learning Avoiding hazards
		Bike routes and bike lanes	2	What is a bike route and what isn’t What is a bike lane and what isn’t Using bike lanes and routes

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Multi-use paths and trails	1	Using trails to practice riding and to have fun
		Collector/arterial streets	2	Avoiding busy roads with fast traffic
		Safe routes to school	1	Picking a good route to ride to school
	2.2 Rules of the Road, Traffic Law, and Responsibilities [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 52, 57, 79, 80]	Signs, signals, and pavement markings	1	Paying attention to signs, signals, and markings What they mean Why they're important
		Bike as a vehicle; legitimacy	2	Bicyclists' rights and responsibilities
		Traffic laws	1	Why we have them The most important traffic laws for beginning bicyclists
		Right of way	3	What right of way is and how it works Why right of way doesn't always work Right of way safety tips
		Enforcement	2	Police enforcement of traffic laws for bicyclists Importance of obeying the rules
		Riding on the right	1	Dangers of riding facing cars Importance of riding with traffic
		2.3 Hazards and Risks [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 50, 51, 52, 57, 66, 79, 80]	Why crashes happen	2
	Risky behaviors		1	Avoiding risky behaviors Things you shouldn't do
	Identifying hazards		1	Learning to look for things that could hurt you
	Avoiding hazards		2	Constant scanning Paying attention to what you're doing Keeping your bike under control

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Reporting hazards	3	Reporting hazards to adults
		Impaired drivers/bicyclists		
	2.4 Traffic Operations and Intersections [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 50, 51, 52, 66, 79, 80]	Children in traffic		
		Entering the roadway	1	Stopping at the end of a driveway Stopping at the end of the sidewalk Stopping at stop signs and red lights Looking all ways, even with a green light
		Lane positioning	2	Where do I belong?
		Making turns	1	Riding on the right when you are going to turn right Using crosswalks to make left turns
		Multi-use paths	2	Riding in a straight line Paying attention to what's going on Moving off the trail when stopped Alerting others when passing
		Parking lots	3	Dangers of parking lots Avoiding parking lots
		Speed judgement	1	Beginning riders often can't judge how fast cars are coming How to tell when it's okay to cross the street
		Getting through intersections	1	Problems and threats Using crosswalks to go straight or turn Waiting until cars stop Going straight through intersections

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	2.5 Communications and Sharing the Road [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 52, 53, 57, 66, 79, 80]	How drivers and bicyclists know what to do	3	Importance of communication
		How drivers and bicyclists can communicate with each other	2	Using hand signals Making eye contact Paying attention to brake lights and turn signals Waiting to see what drivers will do
		Negotiating	3	Asking the driver if you can go
		Making your own decision	1	What to do when a driver tells you to go ahead What can happen if you don't pay attention
		Conspicuity	1	Why some drivers seem to have trouble "seeing" bikes Making yourself more conspicuous
		Courtesy on and off road	3	Respecting drivers, other bicyclists, and pedestrians Slowing down to avoid crashes Passing safely Saying "thank you"
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do	3	Expecting that some may not see you Expecting that some may not stop/yield Taking extra care in dangerous situations (riding on the sidewalk, the wrong way, or coming off a trail to cross a roadway)

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Anticipating what bicyclists might do		
	2.6 Large Motor Vehicles [19]	Buses		
		Trucks		
		RVs		
3.0 Equipment	3.1 About Your Bike [6, 11, 16, 19, 39, 40, 43, 47, 50, 52, 80]	Picking the right bike	2	How to determine the right sized bike What kind of brakes should you get (coaster vs. hand brakes)
		Adjusting	2	Making sure the seat is the right height
		Equipment familiarization	2	Getting used to new brakes Practicing stopping quickly and safely
		Maintaining	3	Keeping your bike running smoothly and safely
		Repairing	3	Getting problems fixed/repaired
	3.2 Essential Equipment [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 50, 51, 52, 57, 80]	Helmet	1	Why helmets are important Riding with a helmet Making sure a helmet fits Wearing a helmet correctly
		Glasses		
		Gloves	3	Wearing bicycle gloves in case you fall
		Lights	3	Dangers of riding at night
	3.3 Accessories 6, 7, 16, 19, 44, 47, 52]	Clothing	3	Picking the right kind of clothes to bike in
		Rain gear	3	Staying warm and dry
		Carrying cargo	2	How to carry things when you are riding
Child seat/trailers				

TARGET AUDIENCE: BEGINNER BICYCLISTS (5-8 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
4.0 All About Bicycling	4.1 Transportation [6, 7, 11, 16, 19, 31, 39, 40, 43, 44, 47, 50, 53]	Environmental impact	3	Benefits of riding for the environment
		Parking/locking your bike	2	Finding good places to lock your bike Using your lock
		Clothing/hygiene		
	4.2 Recreation [6, 11, 19, 40, 43, 43, 53]	Touring and group rides		
	4.3 Health and Fitness [31, 50, 51, 52, 57]	Off-road riding	3	Riding on dirt trails
		Racing	3	Different kinds of bicycle races
		Multi-use trails	2	Good places to practice your riding
		Family fun	3	Asking your parents to go riding with you
		Health benefits	2	Physical activity is important to your health

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES	
			Priority	
1.0 Riding Skills	1.1 Learning to Ride [18]	Developmental stages		
		Balancing	3	
		Pedaling	3	
		Riding in a straight line	2	
		Stopping/braking	3	
		Turning	3	
		Riding with disabilities	3	
		1.2 Basic Riding Skills [2, 8, 13, 15, 18, 32, 37, 38, 42, 43, 46, 54, 58, 59, 64, 79, 80]	Changing gears	1
	Looking behind		1	
	Judging distance/speed		1	
	Riding with one hand		1	
	Night riding		1	
	Recognizing hazards on the road surface		1	
	Dodging hazards		1	

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	1.3 Advanced Riding Skills [2, 15, 18, 37, 38, 41, 42, 46, 54, 59, 80]	Crash avoidance/falling	1	Performing a “panic stop” What to do if you fall
		Gear selection	2	Choosing and using the “right” gear When to change gears Picking the right gear combination on a derailleur gear system
		Group riding	2	Things to watch out for when riding with other people Calling out information to riders in front and behind
		Riding rules	2	Independent decision making Riding safely with friends Looking behind before changing position or turning Avoiding following too close behind another bike Letting people ahead know when you are going to pass them Watching out for others on trails/paths (e.g., young kids, dogs, in-line skaters)
		Weather	1	Riding on wet roads and trails Riding in the winter
		Windblast effect	2	The effect of large trucks and buses on balance and control What to expect and what to do
2.0 On-Road/Traffic Knowledge/Skills	2.2 Route Selection [2, 18, 37, 38, 41, 42, 46, 54, 80]	What makes a good route?	1	Assessing what kinds of roadways, conditions, traffic you can comfortably handle Finding a good route
		Sidewalks	2	Why sidewalks aren’t a good place to ride

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Neighborhood streets	1	Anticipating typical hazards on neighborhood streets
		Bike routes and bike lanes	1	What is a bike route and what isn't What is a bike lane and what isn't Using bike lanes and routes
		Multi-use paths and trails	1	Opportunities and limitations of paths and trails
		Collector/arterial streets	1	Larger roads may have more and faster vehicle traffic Riding on larger roads Identifying streets with bike lanes, wide curb lanes, or paved shoulders
		Safe routes to school	1	Picking a good route to ride to school
	2.2 Rules of the Road, Traffic Law, and Responsibilities [2, 8, 13, 15, 18, 32, 37, 38, 41, 42, 46, 54, 58, 59, 64, 79, 80]	Signs, signals, and pavement markings	1	Paying attention to signs, signals, and markings How to respond to signs, signals, and markings
		Bike as a vehicle; legitimacy	1	Bicyclists' rights and responsibilities Comparing bicycling with driving a car
		Traffic laws	1	The most important traffic laws for bicyclists Importance of traffic law compliance in reducing crashes
		Right of way	1	What right of way is and how it works Why right of way doesn't always work Right of way safety tips Managing right of way situations
		Enforcement	2	Police enforcement of traffic laws for bicyclists and drivers Importance of obeying the rules

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Riding on the right	1	Dangers of riding facing cars Importance of riding with traffic Going just a short distance the wrong way
	2.3 Hazards and Risks [2, 8, 13, 15, 18, 32, 37, 38, 41, 42, 46, 54, 58, 59, 64, 79, 80]	Why crashes happen	2	How riders typically get hurt
		Risky behaviors	1	Avoiding risky behaviors Things you shouldn't do
		Identifying hazards	1	Learning to look for things that could hurt you
		Avoiding hazards	2	Constant scanning Paying attention to what you're doing Keeping your bike under control
		Reporting hazards	3	Reporting hazards to the proper authorities
		Impaired drivers/bicyclists	3	Spotting impaired drivers and bicyclists Taking defensive action
	2.4 Traffic Operations and Intersections [2, 13, 15, 18, 32, 37, 38, 41, 42, 46, 54, 58, 59, 64, 79, 80]	Children in traffic		
		Entering the roadway	2	Stopping and looking all ways, even with a green light
		Lane positioning	1	Positioning on the roadway: where you should ride Positioning when the lane is very narrow Positioning when cars are parked along the road
		Making turns	1	Moving to the right when you are going to turn right Making left turns Using crosswalks for making left turns on busy streets

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Multi-use paths	2	Riding in a straight line Paying attention to what's going on Moving off the trail when stopped Alerting others when passing
		Parking lots	3	Dangers of parking lots Avoiding parking lots Riding defensively if you must travel in a parking lot
		Speed judgement	1	Developing skills
		Getting through intersections	1	Problems and threats Approaching an intersection Dealing with right turn only lanes when you are going straight Where to be when waiting for a green light Going straight Turning left or right Using crosswalks to turn left
	2.5 Communications and Sharing the Road [2, 13, 15, 18, 32, 37, 38, 41, 42, 46, 54, 58, 59, 64, 79, 80]	How drivers and bicyclists know what to do	2	Importance of communication
		How drivers and bicyclists can communicate with each other	1	Using hand signals Making eye contact Paying attention to brake lights and turn signals Waiting to see what drivers will do
		Negotiating	2	Asking the driver if you can go Telling the driver to go first
		Making your own decision	1	What to do when a driver tells you to go What can happen if you don't pay attention

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES	
			Priority	
		Conspicuity	1	Why some drivers seem to have trouble “seeing” bikes Conditions that may make bikes less likely to be seen Making yourself more conspicuous How to tell if you’ve been seen What to do if you haven’t been seen
		Courtesy on and off road	2	Respecting drivers, other bicyclists, and pedestrians Slowing down to avoid crashes Passing safely Saying “thank you”
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do	2	Drivers may expect you to stop/yield Taking extra care when riding on sidewalks, the wrong way, coming off a trail
		Anticipating what bicyclists might do	3	Taking extra care when overtaking younger bicyclists and trail users
	2.6 Large Motor Vehicles	Buses	2	Dealing with buses: what to expect and do
		Trucks	2	Dealing with trucks: what to expect and do
		RVs	2	Dealing with recreational vehicles: what to expect and do
	[54, 64]			

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
3.0 Equipment	3.1 About Your Bike [2, 15, 18, 32, 37, 38, 41, 42, 46, 54, 59, 64, 80]	Picking the right bike	2	What to look for Different kinds of bikes: what's best for you? Picking a good seat How to determine the right sized bike What kind of brakes should you get (coaster vs. hand brakes)
		Adjusting	3	Making sure the seat is the right height
		Equipment familiarization	2	Getting used to new brakes and shifting systems
		Maintaining	2	Keeping your bike running smoothly and safely
		Repairing	3	Getting problems fixed/repaired How to change a flat tire
	3.2 Essential Equipment [2, 8, 13, 15, 18, 32, 37, 38, 41, 42, 46, 54, 58, 59, 64, 79, 80]	Helmet	1	Why helmets are important Riding with a helmet Making sure a helmet fits Wearing a helmet correctly
		Glasses	2	Wearing glasses or other eye protection
		Gloves	3	Wearing bicycle gloves to protect hands in a fall
		Lights	2	Avoiding riding at night Dangers of riding at night What to do if you are going to be riding at night

TARGET AUDIENCE: YOUNG BICYCLISTS (9-12 years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	Priority	CONTENT OBJECTIVES
	3.3 Accessories [2, 32, 42, 46, 59, 64]	Clothing	3	Picking the right kind of clothes to ride in Bike shoes, toe clips, clipless pedals
		Rain gear	3	Staying warm and dry
		Carrying cargo	2	How to carry things when you are riding
		Child seat/trailers		
4.0 All About Bicycling	4.1 Transportation [2, 13, 15, 18, 32, 37, 38, 41, 42, 46, 54, 58, 59, 64]	Environmental impact	3	Environmental benefits of riding
		Parking/locking your bike	1	Finding good places to lock your bike Choosing a good lock Using your lock to protect your bike
		Clothing/hygiene	3	How to ride to school and not look like a mess all day
	4.2 Recreation [64]	Touring and group rides	3	What is bicycle touring?
		Off-road riding	3	Riding on dirt trails Finding places to ride off-road
		Racing	3	Different kinds of bicycle races Getting involved
		Multi-use trails	2	Good places to practice your riding Fun places to ride for people of all ages and abilities
	4.3 Health and Fitness	Family fun	3	Asking friends and parents to go riding with you
		Health benefits	2	Physical activity is important to your health

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES	
		Priority		
1.0 Riding Skills	1.1 Learning to Ride	Developmental stages		
		Balancing	3	Developing skills
		Pedaling	3	Developing skills
		Riding in a straight line	3	Developing skills
		Stopping/braking	3	Developing skills
		Turning	3	Developing skills
		Riding with disabilities	3	Cycling abilities of people with disabilities Special equipment and options
	1.2 Basic Riding Skills [22, 35, 45, 59, 60, 65]	Changing gears	2	Using different kinds of shifters Pedaling when shifting gears Knowing when to shift gears
		Looking behind	1	Looking behind you AND riding straight
		Judging distance/speed	2	Developing skills
		Riding with one hand	2	Developing skills
		Night riding	1	Recognizing and understanding the risks Planning for riding at night Riding at night
		Recognizing hazards on the road surface	1	What can cause a fall Recognizing roadway surface hazards
		Dodging hazards	2	Dealing with roadway surface hazards

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	1.3 Advanced Riding Skills [3, 4, 9, 23, 38, 48, 59, 65]	Crash avoidance/falling	1	Performing a “panic stop” What to do if you fall
		Gear selection	2	Determining the “right” gear Picking the right gear on a derailleur gear system
		Group riding	2	Things to watch out for when riding with other people Calling out information to riders in front and behind
		Riding rules	2	Independent decision making Looking behind before changing position or turning Avoiding following too close behind another bike Letting people ahead know when you are going to pass them Watching out for others on trails/paths (e.g., young kids, dogs, in-line skaters)
		Weather	2	Riding on wet roads and trails Riding in the winter
		Windblast effect	1	Riding near large trucks and buses Maintaining balance What to expect and do
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection [22, 35, 45, 60]	What makes a good route?	2	Knowing your comfort level Elements of a good route
		Sidewalks	3	Problems of sidewalk riding
		Neighborhood streets	3	Anticipating hazards Avoiding hazards
		Bike routes and bike lanes	1	What is a bike route What is a bike lane Using bike lanes and bike routes Riding through intersections

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT Priority		CONTENT OBJECTIVES	
		Multi-use paths and trails	2	Understanding the opportunities and limitations of multi-use paths	
		Collector/arterial streets	1	Increased motor vehicle traffic High speed roads Are you a good enough rider to operate on high speed high traffic roads? Identifying streets with bike lanes, wide curb lanes, or paved shoulders	
		Safe routes to school	1	Picking a good route to school	
	2.2 Rules of the Road, Traffic Law, and Responsibilities [3, 4, 9, 22, 35, 45, 59, 60, 65]		Signs, signals, and pavement markings	2	Paying attention to signs, signals, and markings Dealing with specific situations (e.g., yields and right turn lanes)
			Bike as a vehicle; legitimacy	1	Comparing biking on a roadway to driving a car Bicyclists' rights and responsibilities
			Traffic laws	1	Most important traffic laws for bicyclists Importance of traffic law compliance in reducing crashes
			Right of way	2	Understanding right of way Limitations of right of way rules How to manage right of way situations
			Enforcement	2	Police enforcement of traffic laws Importance of compliance
			Riding on the right	2	Dangers of riding facing cars Going a short distance the wrong way
			Why crashes happen	2	Types of crashes Crash scenarios
	2.3 Hazards and Risks [3, 4, 9, 22, 35, 45, 59, 60, 65]		Risky behaviors	1	Avoiding risky behaviors

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Identifying hazards	1	Learning what to look for (e.g., cars entering the roadway, obstructions, dogs, debris, etc.)
		Avoiding hazards	2	Constant scanning Paying attention Keeping your bike under control
		Reporting hazards	3	Informing authorities about hazards
		Impaired drivers/bicyclists	3	Spotting impaired drivers and bicyclists Taking defensive action Bicycling while impaired
	2.4 Traffic Operations and Intersections [3, 4, 9, 22, 35, 45, 59, 60, 65]	Children in traffic		
		Entering the roadway	3	
		Lane positioning	1	Where do I belong? Positioning on the roadway Positioning on narrow roads Positioning near parked cars
		Making turns	2	Positioning on the right side of the road to turn right Making a left hand turn Using crosswalks for making turns on busy roads
		Multi-use paths	3	Riding in a straight line Paying attention to what's going on Moving off the trail when stopped Alerting others of passing
		Parking lots	3	Dangers of parking lots Riding defensively in parking lots
		Speed judgement	3	Developing skills

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Getting through intersections	2	Problems and threats Approaching an intersection Going straight next to a right turn only lane Positioning when waiting for green light Going straight Turning right or left Using crosswalks to make a left turn
	2.5 Communications and Sharing the Road [3, 4, 9, 22, 35, 45, 59, 60]	How drivers and bicyclists know what to do	2	Importance of communication
		How drivers and bicyclists can communicate with each other	1	Using hand signals Making eye contact Paying attention to brake lights and turn signals Waiting to see what drivers will do
		Negotiating	1	Asking the driver if you can go Telling the driver to go first
		Making your own decision	1	When a driver tells you to go ahead Need to pay attention Secondary threats
		Conspicuity	1	Why some drivers seem to have trouble “seeing” bikes Conditions that may make bicyclists less likely to be seen Making yourself more conspicuous How to tell if you’ve been seen What to do if you haven’t

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	Priority	CONTENT OBJECTIVES
		Courtesy on and off road	2	Respecting drivers, other bicyclists, and pedestrians Passing safely Saying “thank you”
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do	1	Determining your actions Educated guesses Taking extra care in dangerous situations (riding on the sidewalk, the wrong way, or coming off a trail to cross a roadway)
	2.6 Large Motor Vehicles	Anticipating what bicyclists might do	2	Exercising special care when overtaking other bicyclists and anyone on a trail
		Buses	2	Dealing with buses What to expect and what to do
		Trucks	2	Dealing with trucks What to expect and what to do
		RVs	2	Dealing with recreational vehicles What to expect and what to do
3.0 Equipment	3.1 About Your Bike [3, 4, 9, 22, 35, 45, 59, 60, 65]	Picking the right bike	3	What to look for when shopping for a bike How to determine the right sized bike Different kinds of bikes Choosing what’s best for you Picking a good seat
		Adjusting	3	Making sure the seat is the right height
		Equipment familiarization	3	Getting used to new brakes and shifting systems
		Maintaining	2	Keeping your bike running smoothly and safely

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	3.2 Essential Equipment [3, 4, 9, 22, 35, 45, 59, 60, 65]	Repairing	3	Getting problems fixed/repaired How to change a flat tire
		Helmet	1	Why helmets are important Riding with a helmet Making sure a helmet fits Wearing a helmet correctly
		Glasses	2	Understanding the importance of eye protection
		Gloves	3	Wearing bicycle gloves as protective gear
		Lights	1	Dangers of riding at night Equipment options for night riding
	3.3 Accessories [3, 4, 35, 45, 59, 60, 65]	Clothing	3	Picking the right kind of clothes Bike shoes, toe clips, and clipless pedals
		Rain gear	3	Staying warm and dry
		Carrying cargo	2	How to carry things when you are riding
		Child seat/trailers		Understanding the available options Getting used to the bike handling differently
	4.0 All About Bicycling	4.1 Transportation [3, 4, 9, 22, 35, 45, 59, 60]	Environmental impact	3
Parking/locking your bike			1	Finding good places to lock your bike Choosing a good lock Using your lock
Clothing/hygiene			3	How to ride to school/work and not look like a mess all day!
4.2 Recreation [22, 35, 45, 65]		Touring and group rides	3	What is bicycle touring
		Off-road riding	3	What is involved in riding off-road Finding places to ride off-road
		Racing	3	Different kinds of bicycle races Getting involved in racing

TARGET AUDIENCE: TEENAGE BICYCLISTS (13+ years)

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Multi-use trails	3	Good places to practice your riding Adjusting to the special challenges of riding multi-use trails
	4.3 Health and Fitness [22, 36, 65]	Family fun	3	Inviting friends and parents to go riding with you
		Health benefits	2	The importance of regular physical activity Bicycling as a life-time activity

TARGET AUDIENCE: ADULT BICYCLISTS

TARGET AUDIENCE: ADULT BICYCLISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
1.0 Riding Skills	1.1 Learning to Ride [69]	Developmental stages		
		Balancing	3	Developing skills
		Pedaling	2	Developing skills
		Riding in a straight line	2	Developing skills
		Stopping/braking	2	Developing skills
		Turning	3	Developing skills
		Riding with disabilities	3	Cycling abilities of people with disabilities Special equipment and options
	1.2 Basic Riding Skills [34, 60, 71]	Changing gears	2	Using different kinds of shifters Pedaling when shifting gears Knowing when to shift gears
		Looking behind	1	Looking behind you AND riding straight
		Judging distance/speed	3	Developing skills
		Riding with one hand	2	Developing skills
		Night riding	1	Recognizing and understanding the risks Planning for riding at night Riding at night
		Recognizing hazards on the road surface	1	What can cause a fall Recognizing roadway surface hazards
		Dodging hazards	1	Dealing with roadway surface hazards

TARGET AUDIENCE: ADULT BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	1.3 Advanced Riding Skills [5, 12, 30, 34, 71, 76]	Crash avoidance/falling	2	Performing a “panic stop” What to do if you fall
		Gear selection	2	Determining the “right” gear Picking the right gear on a derailleur gear system
		Group riding	2	Things to watch out for when riding with other people Calling out information to riders in front and behind
		Riding rules	2	Independent decision making Looking behind before changing position or turning Avoiding following too close behind another bike Letting people ahead know when you are going to pass them Watching out for others on trails/paths (e.g., young kids, dogs, in-line skaters)
		Weather	2	Riding on wet roads and trails Riding in the winter
		Windblast effect	1	Riding near large trucks and buses Maintaining balance What to expect and do
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection [5, 34, 60, 70, 73, 75, 76]	What makes a good route?	2	Knowing your comfort level Elements of a good route
		Sidewalks	3	Problems of sidewalk riding
		Neighborhood streets	3	Anticipating hazards Avoiding hazards
		Bike routes and bike lanes	2	What is a bike route What is a bike lane Using bike lanes and bike routes Riding through intersections

TARGET AUDIENCE: ADULT BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Multi-use paths and trails	2	Understanding the opportunities and limitations of multi-use paths
		Collector/arterial streets	1	Increased motor vehicle traffic High speed roads Are you a good enough rider to operate on high speed high traffic roads? Identifying streets with bike lanes, wide curb lanes, or paved shoulders
		Safe routes to school		
	2.2 Rules of the Road, Traffic Law, and Responsibilities	Signs, signals, and pavement markings	2	Paying attention to signs, signals, and markings Dealing with specific situations (e.g., yields and right turn lanes)
	[5, 12, 30, 33, 34, 60, 71]	Bike as a vehicle; legitimacy	2	Comparing biking on a roadway to driving a car Bicyclists' rights and responsibilities
		Traffic laws	2	Most important traffic laws for bicyclists Importance of traffic law compliance in reducing crashes
		Right of way	3	Understanding right of way Limitations of right of way rules How to manage right of way situations
		Enforcement	3	Police enforcement of traffic laws Importance of compliance
		Riding on the right	3	Dangers of riding facing cars Going just a short way the wrong way
	2.3 Hazards and Risks	Why crashes happen	2	Types of crashes Crash scenarios
	[5, 12, 30, 33, 34, 60, 71, 75, 76]	Risky behaviors	3	Avoiding risky behaviors

TARGET AUDIENCE: ADULT BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Identifying hazards	2	Learning what to look for (e.g., cars entering the roadway, obstructions, dogs, debris, etc.)
		Avoiding hazards	3	Constant scanning Paying attention Keeping your bike under control
		Reporting hazards	3	Informing authorities about hazards
		Impaired drivers/bicyclists	2	Spotting impaired drivers and bicyclists Taking defensive action Bicycling while impaired
	2.4 Traffic Operations and Intersections [5, 12, 30, 33, 34, 60, 71, 76]	Children in traffic		
		Entering the roadway		
		Lane positioning	1	Where do I belong? Positioning on the roadway Positioning on narrow roads Positioning near parked cars
		Making turns	1	Positioning on the right side of the road to turn right Making a left hand turn Using crosswalks for making turns
		Multi-use paths	3	Riding in a straight line Paying attention to what's going on Moving off the trail when stopped Alerting others of passing
		Parking lots	3	Dangers of parking lots Riding defensively in parking lots
		Speed judgement	3	Developing skills

TARGET AUDIENCE: ADULT BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Getting through intersections	1	Problems and threats Approaching an intersection Going straight next to a right turn only lane Positioning when waiting for green light Going straight Turning right or left Using crosswalks to make a left turn
	2.5 Communications and Sharing the Road [5, 34, 60, 71, 76]	How drivers and bicyclists know what to do	3	Importance of communication
		How drivers and bicyclists can communicate with each other	2	Using hand signals Making eye contact Paying attention to brake lights and turn signals Waiting to see what drivers will do
		Negotiating	1	Asking the driver if you can go Telling the driver to go first
		Making your own decision	2	When a driver tells you to go ahead Need to pay attention Secondary threats
		Conspicuity	1	Why some drivers seem to have trouble “seeing” bikes Conditions that may make bicyclists less likely to be seen Making yourself more conspicuous How to tell if you’ve been seen What to do if you haven’t

TARGET AUDIENCE: ADULT BICYCLISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	Priority	CONTENT OBJECTIVES
		Courtesy on and off road	2	Respecting drivers, other bicyclists, and pedestrians Passing safely Saying “thank you”
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do	1	Determining your actions Educated guesses Taking extra care in dangerous situations (riding on the sidewalk, the wrong way, or coming off a trail to cross a roadway)
	2.6 Large Motor Vehicles [5]	Anticipating what bicyclists might do	2	Exercising special care when overtaking other bicyclists and anyone on a trail
		Buses	2	Dealing with buses What to expect and what to do
		Trucks	2	Dealing with trucks What to expect and what to do
		RVs	2	Dealing with recreational vehicles What to expect and what to do
3.0 Equipment	3.1 About Your Bike [5, 12, 34, 60, 70, 72]	Picking the right bike	3	What to look for when shopping for a bike How to determine the right sized bike Different kinds of bikes Choosing what’s best for you Picking a good seat
		Adjusting	2	Making sure the seat is the right height
		Equipment familiarization	3	Getting used to new brakes and shifting systems
		Maintaining	2	Keeping your bike running smoothly and safely

TARGET AUDIENCE: ADULT BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES	
			Priority		
	3.2 Essential Equipment [5, 30, 34, 60, 70, 72, 75]	Repairing	3	Getting problems fixed/repaired How to change a flat tire	
		Helmet	1	Why helmets are important Riding with a helmet Making sure a helmet fits Wearing a helmet correctly	
		Glasses	2	Understanding the importance of eye protection	
		Gloves	3	Wearing bicycle gloves as protective gear	
		Lights	1	Dangers of riding at night Equipment options for night riding	
	3.3 Accessories [5, 34, 60, 70, 72, 75, 76]	Clothing	3	Picking the right kind of clothes Bike shoes, toe clips, and clipless pedals	
		Rain gear	3	Staying warm and dry	
		Carrying cargo	2	How to carry things when you are riding	
	4.0 All About Bicycling	4.1 Transportation [5, 12, 30, 33, 34, 60, 71, 76]	Environmental impact	3	Benefits for the environment
			Parking/locking your bike	1	Finding good places to lock your bike Choosing a good lock Using your lock
Clothing/hygiene			3	How to ride to work and not look like a mess all day!	
4.2 Recreation [12, 33, 73, 75]		Touring and group rides	3	What is bicycle touring Benefits of touring	
		Off-road riding	3	What is involved in riding off-road Finding places to ride off-road	
		Racing	3	Different kinds of bicycle races Getting involved in racing	

TARGET AUDIENCE: ADULT BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Multi-use trails	2	Good places to practice your riding Adjusting to the special challenges of riding multi-use trails
	4.3 Health and Fitness [12, 33, 70, 73, 74]	Family fun	3	Riding with your spouse, children, friends
		Health benefits	2	The importance of regular physical activity Bicycling as a life-time activity

TARGET AUDIENCE: SENIOR BICYCLISTS

TARGET AUDIENCE: SENIOR BICYCLISTS			
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES
			Priority
1.0 Riding Skills	1.1 Learning to Ride	Developmental stages	
		Balancing	2
		Pedaling	3
		Riding in a straight line	1
		Stopping/braking	1
		Turning	2
		Riding with disabilities	3
	1.2 Basic Riding Skills	Changing gears	2
		Looking behind	1
		Judging distance/speed	1
		Riding with one hand	2
		Night riding	3
		Recognizing hazards on the road surface	1
		Dodging hazards	3

TARGET AUDIENCE: SENIOR BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	1.3 Advanced Riding Skills	Crash avoidance/falling	2	Performing a “panic stop” Learning to fall What to do if you fall
		Gear selection	2	Determining the “right” gear Picking the right gear on a derailleur gear system
		Group riding	2	Things to watch out for when riding with other people Calling out information to riders in front and behind
		Riding rules	2	Independent decision making Looking behind before changing position or turning Avoiding following too close behind another bike Letting people ahead know when you are going to pass them Watching out for others on trails/paths (e.g., young kids, dogs, in-line skaters)
		Weather	2	Riding on wet roads and trails Increased braking time on wet roads Riding in the winter
		Windblast effect	3	Riding near large trucks and buses Maintaining balance What to expect and do

TARGET AUDIENCE: SENIOR BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection	What makes a good route?	1	Knowing your comfort level Elements of a good route
		Sidewalks	1	Problems of sidewalk riding Special precautions for sidewalk riding
		Neighborhood streets	2	Anticipating hazards Avoiding hazards
		Bike routes and bike lanes	2	What is a bike route What is a bike lane Determining if bike lanes and bike routes are good routes for you Riding through intersections
		Multi-use paths and trails	2	Understanding the opportunities and limitations of multi-use paths
		Collector/arterial streets	2	Increased motor vehicle traffic High speed roads Are you a good enough rider to operate on high speed high traffic roads? Identifying streets with bike lanes, wide curb lanes, or paved shoulders
		Safe routes to school		
	2.2 Rules of the Road, Traffic Law, and Responsibilities	Signs, signals, and pavement markings	3	Paying attention to signs, signals, and markings Dealing with specific situations (e.g., yields and right turn lanes)
		Bike as a vehicle; legitimacy	3	Comparing biking on a roadway to driving a car Bicyclists' rights and responsibilities
		Traffic laws	3	Most important traffic laws for bicyclists Importance of traffic law compliance in reducing crashes

TARGET AUDIENCE: SENIOR BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Right of way	3	Understanding right of way Limitations of right of way rules How to manage right of way situations
		Enforcement	3	Police enforcement of traffic laws Importance of compliance Maintaining a defensive riding attitude even when law is in your favor
		Riding on the right	3	Dangers of riding facing cars Going just a short way the wrong way
	2.3 Hazards and Risks	Why crashes happen	3	Types of crashes Crash scenarios
		Risky behaviors	2	Avoiding risky behaviors
		Identifying hazards	2	Learning what to look for (e.g., cars entering the roadway, obstructions, dogs, debris, etc.)
		Avoiding hazards	3	Constant scanning Paying attention Keeping your bike under control
		Reporting hazards	3	Informing authorities about hazards
		Impaired drivers/bicyclists	3	Spotting impaired drivers and bicyclists Taking defensive action Bicycling while impaired
	2.4 Traffic Operations and Intersections	Children in traffic		
		Entering the roadway		
		Lane positioning	2	Where do I belong? Positioning on the roadway Positioning on narrow roads Positioning near parked cars

TARGET AUDIENCE: SENIOR BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Making turns	1	Positioning on the right side of the road to turn right Making a left hand turn Using crosswalks for making turns on busy roads
		Multi-use paths	2	Riding in a straight line Paying attention to what's going on Moving off the trail when stopped Alerting others of passing
		Parking lots	3	Dangers of parking lots Riding defensively in parking lots
		Speed judgement	1	Developing skills
		Getting through intersections	1	Problems and threats Approaching an intersection Going straight next to a right turn only lane Positioning when waiting for green light Going straight Turning right or left Using crosswalks to make a left turn
	2.5 Communications and Sharing the Road	How drivers and bicyclists know what to do	3	Importance of communication
		How drivers and bicyclists can communicate with each other	2	Using hand signals Making eye contact Paying attention to brake lights and turn signals Waiting to see what drivers will do
		Negotiating	2	Asking the driver if you can go Telling the driver to go first

TARGET AUDIENCE: SENIOR BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Making your own decision	2	When a driver tells you to go ahead Need to pay attention Secondary threats
		Conspicuity	1	Why some drivers seem to have trouble “seeing” bikes Conditions that may make bicyclists less likely to be seen Making yourself more conspicuous How to tell if you’ve been seen What to do if you haven’t
		Courtesy on and off road	3	Respecting drivers, other bicyclists, and pedestrians Passing safely Saying “thank you”
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do	2	Drivers may or may not be looking for you or stop/yield Taking extra care in dangerous situations (riding on the sidewalk, the wrong way, or coming off a trail to cross a roadway)
		Anticipating what bicyclists might do	3	Exercising special care when overtaking other bicyclists and anyone on a trail
	2.6 Large Motor Vehicles	Buses	2	Dealing with buses What to expect and what to do
		Trucks	2	Dealing with trucks What to expect and what to do
		RVs	2	Dealing with recreational vehicles What to expect and what to do

TARGET AUDIENCE: SENIOR BICYCLISTS					
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	Priority	CONTENT OBJECTIVES	
3.0 Equipment	3.1 About Your Bike	Picking the right bike	2	What to look for when shopping for a bike How to determine the right sized bike Different kinds of bikes Choosing what's best for you Picking a good seat	
		Adjusting	2	Making sure the seat is the right height	
		Equipment familiarization	3	Getting used to new brakes and shifting systems	
		Maintaining	2	Keeping your bike running smoothly and safely	
		Repairing	3	Getting problems fixed/repaired How to change a flat tire	
	3.2 Essential Equipment	Helmet	1	Why helmets are important Riding with a helmet Making sure a helmet fits Wearing a helmet correctly	
		Glasses	2	Understanding the importance of eye protection	
		Gloves	3	Wearing bicycle gloves as protective gear	
		Lights	2	Dangers of riding at night Equipment options for night riding	
	3.3 Accessories	Clothing	3	Picking the right kind of clothes Bike shoes, toe clips, and clipless pedals	
		Rain gear	3	Staying warm and dry	
		Carrying cargo	3	How to carry things when you are riding	
		Child seat/trailers	3	Understanding the available options Getting used to the bike handling differently	
	3.0 All About Bicycling	4.1 Transportation	Environmental impact	3	Benefits for the environment

TARGET AUDIENCE: SENIOR BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Parking/locking your bike	2	Finding good places to lock your bike Choosing a good lock Using your lock
		Clothing/hygiene		How to ride to work and not look like a mess all day!
	4.2 Recreation	Touring and group rides	3	What is bicycle touring Benefits of touring
		Off-road riding	3	What is involved in riding off-road Finding places to ride off-road
		Racing	3	Different kinds of bicycle races Getting involved in racing
		Multi-use trails	2	Good places to practice your riding Adjusting to the special challenges of riding multi-use trails
	4.3 Health and Fitness	Family fun	3	Riding with your spouse, children, grandchildren, friends
		Health benefits	2	The importance of regular physical activity Bicycling as a life-time activity

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	PRIORITY	CONTENT OBJECTIVES
1.0 Riding Skills	1.1 Learning to Ride [1, 10, 14, 17, 20, 21, 23, 24, 25, 26, 48, 77]	Developmental stages	1	Limits of children's abilities to deal with traffic What kids understand and can handle at different ages Adjusting expectations to the limitations of children
		Balancing	1	Teaching balance Developing skills
		Pedaling	2	Teaching pedaling Developing skills
		Riding in a straight line	1	Teaching how to ride straight Developing skills
		Stopping/braking	1	Teaching how to use brakes Developing skills
		Turning	3	Teaching how to make turns Preventing falls Developing skills
		Riding with disabilities		Teaching children with disabilities to ride and enjoy riding a bicycle Special equipment and options
	1.2 Basic Riding Skills [1, 10, 14, 17, 20, 21, 23, 24, 25, 26, 48, 61, 78]	Changing gears		
		Looking behind	1	Teaching the importance of looking behind Developing skills
		Judging distance/speed	1	How and when children develop the ability to perform this task
		Riding with one hand		
Night riding		1	Discouraging young children from riding at night	

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	1.3 Advanced Riding Skills [17, 21, 48]	Recognizing hazards on the road surface		
		Dodging hazards		
		Crash avoidance/falling		
		Gear selection		
		Group riding		
		Riding rules		
		Weather		
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection [1, 14, 20, 21, 23, 24, 25, 26, 48, 78]	What makes a good route?	1	Determining where to let children ride and not ride
		Sidewalks	1	Understanding and dealing with sidewalk riding Teaching the hazards of sidewalk riding
		Neighborhood streets	1	Teaching children to ride in the street; when and how How to ride with a child learning to ride on the road
		Bike routes and bike lanes		
		Multi-use paths and trails	1	Practicing riding with new young riders
		Collector/arterial streets		
		Safe routes to school	1	Picking a good route for children to ride to school Teaching children to deal with hazards on the way to school

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	2.2 Rules of the Road, Traffic Law, and Responsibilities [10, 14, 20, 21, 23, 24, 25, 26, 48, 61, 78]	Signs, signals, and pavement markings	1	Explaining what signs, signals, and markings mean Why they are important
		Bike as a vehicle; legitimacy	2	Teaching children to take bicycling seriously
		Traffic laws	1	Explaining why we have traffic laws The most important traffic laws for a beginning bicyclist
		Right of way	3	Why cars may not stop
		Enforcement	3	Police may stop bicyclists who aren't following the rules Importance of obeying the rules
		Riding on the right	1	Riding where cars expect bikes to be When and how to go just a short way the wrong way
	2.3 Hazards and Risks [1, 10, 14, 17, 20, 21, 23, 24, 25, 26, 48, 61, 78]	Why crashes happen	2	How beginning riders typically get hurt
		Risky behaviors	1	Kinds of things that can hurt kids on bikes (e.g., going too fast, turning without looking back)
		Identifying hazards	2	Kinds of things that contribute to crashes
		Avoiding hazards	3	Scanning all the time Paying attention to what you are doing Keeping your bike under control
		Reporting hazards	2	Reporting hazards to the proper authorities
		Impaired drivers/bicyclists		

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	2.4 Traffic Operations and Intersections [1, 10, 14, 20, 21, 23, 24, 25, 26, 48, 61, 78]	Children in traffic		
		Entering the roadway	1	Stopping at the end of the driveway, at the end of the sidewalk, at stop signs and at red lights. Looking all ways, even with a green light
		Lane positioning	2	Where to position yourself on the road
		Making turns	1	Staying on the right side of the road when you are going to turn right Making a left turn by using crosswalks
		Multi-use paths	2	Riding in a straight line Paying attention to what's going on Moving off the trail when you stop
		Parking lots	3	Staying out of parking lots
		Speed judgement	1	Preschool and beginning riders cannot tell how fast cars are coming Teaching very young bicyclists how to cross the street or make a turn
		Getting through intersections	1	Using the crosswalks Waiting until cars stop
	2.5 Communications and Sharing the Road [10, 14, 20, 21, 23, 24, 25, 26, 48, 61, 78]	How drivers and bicyclists know what to do	3	Explaining the importance of communicating with drivers
		How drivers and bicyclists can communicate with each other	2	Using hand signals Waiting to make sure what drivers are going to do

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Negotiating	3	Asking drivers if it's okay to go
		Making your own decision	1	What to do when a driver says it's okay to go What can happen if you don't pay attention
		Conspicuity	1	Why some drivers have trouble seeing bikes What can be done to make bicyclists more conspicuous
		Courtesy on and off road	3	Slowing down to avoid crashes Saying "thank you"
		Safe passing distance		
		School drop-off		
		Anticipating what drivers might do	3	Explaining that drivers may not be looking for bikes Explaining that drivers won't always stop/yield Being extra careful when you are on the sidewalk, riding the wrong way, or coming off a trail
		Anticipating what bicyclists might do		

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	Priority	CONTENT OBJECTIVES
	2.6 Large Motor Vehicles	Buses		
		Trucks		
		RVs		
3.0 Equipment	3.1 About Your Bike [1, 20, 21, 23, 24, 25, 48, 77]	Picking the right bike	1	Getting a bike that is the right size Getting the right kind of brakes (coaster vs. hand brakes)
		Adjusting	2	Making sure the seat is the right height
		Equipment familiarization	2	Using the brakes to stop quickly and safely
		Maintaining	2	Paying attention to keep a bike running smoothly and safely
	3.2 Essential Equipment [1, 20, 21, 23, 24, 25, 48, 61, 77, 78]	Repairing	3	Getting it fixed right away if it's broken
		Helmet	1	Why helmets are important Riding with a helmet Making sure the helmet fits Wearing the helmet correctly
		Glasses		
		Gloves	3	Wearing bicycle gloves in case you fall
		Lights	3	Avoiding riding at night
	3.3 Accessories [48]	Clothing	3	Picking the right kind of clothes to ride in
		Rain gear	3	Staying warm and dry
		Carrying cargo	3	How to carry things when you are riding
Child seat/trailers				
4.0 All About Bicycling	4.1 Transportation [1, 10, 14, 17, 20, 21, 23, 24, 25, 26, 48]	Environmental impact	3	Riding a bike is good for the environment
		Parking/locking your bike	2	Making sure you keep your bike by locking it up
		Clothing/hygiene		

TARGET AUDIENCE: ADULTS TEACHING PRESCHOOL AND BEGINNER BICYCLISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
	4.2 Recreation [10, 17, 21, 24, 25, 26, 48]	Touring and group rides		
		Off-road riding	3	Riding on a dirt trail
		Racing	3	Learning about the different kinds of bicycle races
		Multi-use trails	2	Things to keep in mind when riding on a trail
	4.3 Health and Fitness [17, 21, 48]	Family fun	3	Encouraging children to ask parents or friends to ride with them
		Health benefits	2	The importance of regular physical activity

TARGET AUDIENCE: MOTORISTS

TARGET AUDIENCE: MOTORISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	PRIORITY	CONTENT OBJECTIVES
1.0 Riding Skills	1.1 Learning to Ride	Developmental stages	1	Limits of children's abilities to deal with traffic Children are not small adults Adjusting expectations to the limitations of children
		Balancing		
		Pedaling		
		Riding in a straight line		
		Stopping/braking		
		Turning		
		Riding with disabilities		
	1.2 Basic Riding Skills	Changing gears		
		Looking behind		
		Judging distance/speed	1	Children under the age of 10 generally cannot judge motor vehicle speeds Making allowances for children near the road and reducing speed
		Riding with one hand		
		Night riding	1	Bicyclists are more difficult to see at night What motor vehicle operators must do to detect bicyclists on the road
		Recognizing hazards on the road surface		
		Dodging hazards		

TARGET AUDIENCE: MOTORISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES	
		Priority		
	1.3 Advanced Riding Skills	Crash avoidance/falling		
		Gear selection		
		Group riding	2	How to pass groups of bicyclists
		Riding rules		
		Weather	1	Weather and lighting conditions can impair a motor vehicle operator's ability to see what's on the road Making appropriate adjustments for snow, ice, sun glare, dirty windshields
		Windblast effect	2	Effect of large motor vehicles on bicyclists' control and balance How to lessen the effect by moving over or slowing down
2.0 On-Road/Traffic Knowledge/Skills	2.1 Route Selection [63]	What makes a good route?		
		Sidewalks	1	Watching for children on sidewalks when entering and exiting driveways Watching for children riding out from driveways Watching for bicyclists and pedestrians on sidewalks, especially coming from the right hand side at intersections
		Neighborhood streets	1	Watching and slowing for children riding and playing on neighborhood streets
		Bike routes and bike lanes	2	How to operate in the presence of bike lanes

TARGET AUDIENCE: MOTORISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	Priority	CONTENT OBJECTIVES
		Multi-use paths and trails	2	Why some bicyclists prefer to ride on the roadway even when there is a train/path nearby Paying extra attention where trails intersect with roads
		Collector/arterial streets	1	Why bicyclists ride on busy streets
		Safe routes to school	1	Paying special attention around school zones Slowing down near and around schools in morning and afternoon
	2.2 Rules of the Road, Traffic Law, and Responsibilities	Signs, signals, and pavement markings	1	Bicyclists count on motor vehicle operators to obey signs and signals Anticipating that bicyclists may disobey signs, signals, and markings
	[49, 56, 63, 80, 81, 82]	Bike as a vehicle; legitimacy	1	Bicycles are defined or treated as vehicles Bicyclists have the same rights and responsibilities as motor vehicle operators
		Traffic laws	1	Most crashes involve one or more violations of the traffic laws Complying with the law enhances safety for all users
		Right of way	1	What right of way rules are and how they are supposed to work Why right of way rules don't always work What to do to avoid problems

TARGET AUDIENCE: MOTORISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT	CONTENT OBJECTIVES	
			Priority	
		Enforcement	2	Police can and should stop bicyclists and drivers who aren't complying with traffic laws Importance of obeying traffic laws
		Riding on the right	1	Wrong-way riding is a significant factor in bicycle crashes Be alert for the possibility of wrong-way riders, especially at intersections
	2.3 Hazards and Risks	Why crashes happen	1	What typically causes motor vehicles and bicycles to crash
	[49, 56, 63, 80, 81, 82]	Risky behaviors	2	Learning what motor vehicle operators do that contributes to bicycle crashes
		Identifying hazards	2	Understanding sight distance problems Learning to identify things that might cause a bicyclist to move to the left
		Avoiding hazards	3	Slowing when a potential hazard exists
		Reporting hazards	3	Reporting hazards to proper authorities Informing bicyclists of hazards
		Impaired drivers/bicyclists	1	DWI is a major contributing factor to motor vehicle/bicycle crashes Learning to recognize and adjust for impaired bicyclists
		2.4 Traffic Operations and Intersections	Children in traffic	1
	[49, 63, 80, 81, 82]	Entering the roadway	1	Watching for children riding out of driveways and off the end of sidewalks Learning to always look to the right (and left) at intersections before turning

TARGET AUDIENCE: MOTORISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Lane positioning	1	Respecting bicyclists as operators of vehicles Sharing the road
		Making turns	2	Looking for bicyclists when preparing to make a turn
		Multi-use paths	2	Paying extra attention to bicyclists at intersections with trails/paths
		Parking lots	2	Paying attention to the possible presence of bicycles in parking lots
		Speed judgement	1	Young children cannot judge how fast cars are coming Some senior bicyclists may need more time to cross a street
		Getting through intersections	1	Being alert for bicyclists in intersections when the signal changes (they may need additional time to clear the intersection)
	2.5 Communications and Sharing the Road	How drivers and bicyclists know what to do	2	The importance of communicating with bicyclists
	[49, 56, 63, 80, 81, 82]	How drivers and bicyclists can communicate with each other	1	Looking for and understanding hand signals Making eye contact Using turn signals Waiting to make sure what the bicyclist is going to do
		Negotiating	2	Yielding to a bicyclist as if they were another motor vehicle Being careful about waving a bicyclist across, especially on a multi-lane roadway

TARGET AUDIENCE: MOTORISTS

TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES	
			Priority		
		Making your own decision			
		Conspicuity	1	Training yourself to always look for bicycles	
		Courtesy on and off road	1	Bicyclists are no more or less likely to obey traffic laws than motorists Treating bicyclists with courtesy will help improve conditions for everyone	
		Safe passing distance	1	How to judge the appropriate passing distance and possible need to slow	
		School drop-off	1	Bicycling to school with your child/children Driving slowly near or around schools in the morning or afternoon Paying close attention to the presence of children riding or walking to school	
		Anticipating what drivers might do			
		Anticipating what bicyclists might do	2	Riding a bike to develop a better sense for what it feels like to share the road with motor vehicles Paying attention to bicyclists on the road and learning to anticipate what they might do	
		2.6 Large Motor Vehicles [49, 82]	Buses	1	The impact of buses on bicyclists and how best to compensate/adjust
			Trucks	2	The impact of trucks on bicyclists and how best to compensate/adjust
			RVs	2	The impact of recreational vehicles on bicyclists and how best to compensate/adjust

TARGET AUDIENCE: MOTORISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
3.0 Equipment	3.1 About Your Bike	Picking the right bike		
		Adjusting		
		Equipment familiarization		
		Maintaining		
		Repairing		
	3.3 Essential Equipment	Helmet		
		Glasses		
		Gloves		
		Lights	2	Recognizing the lights and reflectors used by bicyclists
	3.4 Accessories	Clothing		
		Rain gear		
		Carrying cargo		
		Child seat/trailers	2	Anticipating and adjusting for bikes pulling trailers
4.0 All About Bicycling	4.1 Transportation [49, 56]	Environmental impact	3	The benefits of bicycling, for the environment and traffic congestion
		Parking/locking your bike		
		Clothing/hygiene		
	4.2 Recreation	Touring and group rides	1	Occasional bicycle tours may impact the traffic on some roads on some dates (much as do sporting and other special events that attract large numbers of motor vehicles)
		Off-road riding		

TARGET AUDIENCE: MOTORISTS				
TOPIC	SUBTOPIC [Database Entry Number]	SUBJECT		CONTENT OBJECTIVES
			Priority	
		Racing	2	Occasional bicycle races may impact the traffic on some roads on some dates (much as do sporting and other special events that attract large numbers of motor vehicles)
		Multi-use trails		
	4.3 Health and Fitness	Family fun		
		Health benefits	2	