Appendix A — Field Investigation Form

The Selection Tool within the BIKESAFE expert system requires a number of inputs describing the geometrics and operations of the location in question. The system uses these inputs to refine the selection of applicable countermeasures. Included on the following page is a form that may be used in the field to acquire these data elements.

BICYCLE COUNTERMEASURE SELECTION SYSTEM FIELD INVESTIGATION FORM

Location:					
	Date:				
		Location			
		Intersection			
		Midblock			
		Number of Through I	_anes		
		≤ 2 lanes			
		3-4 lanes			
		≥ 5 lanes			
			•		
		Traffic Volume (Avera	ge Daily Traffic)		
			ligo Duny mamo,		
		.,	I		
		B2 - F - 222 -			
Signalization Traffic signal present (removal is NOT an option)					
1)		Notice of other			
ption)					
1)					
•					
l	ption)	ption)	Location Intersection Midblock Number of Through I ≤ 2 lanes 3-4 lanes ≥ 5 lanes Traffic Volume (Avera < 10,000 10,000-25,000 > 25,000 Bike Facilities Bike lane Wide curb lane Paved shoulder None or other		

Notes

^A Use 85th percentile speed if available. If not available, add 9 mi/h to the posted speed limit as a surrogate measure for the 85th percentile speed. Prior research has shown that 85th percentile speeds for vehicles traveling on many urban and suburban streets (including arterial, collector, and local classifications) generally exceed the posted limit by 6 to 14 mi/h. (D.L. Harkey, H.D. Robertson, and S.E. Davis, "Assessment of Current Speed Zoning Criteria," *Transportation Research Record 1281*, Transportation Research Board, Washington, DC 1990.)

Appendix B – Case Study Matrix

Included on the following pages is a matrix that shows the specific countermeasures addressed by each of the case studies included in Chapter 6.

CONNTERMED SHOULDERS S MANAGE. #1 - Roadway Surface Hazards for Bikes #2 - A Tale of Portland Bridges #3 - Lightling in the Knapps Hill Tunnel #4 - Back-in Diagonal Parking with Bike Lanes #3 - Lightling in the Knapps Hill Tunnel #4 - Back-in Diagonal Parking with Bike Lanes #5 - Valencia Street Road Diet—Creating Space for Cyclists #5 - Valencia Street Road Diet—Creating Space for Cyclists #5 - Valencia Street Road Diet—Creating Space for Cyclists	INTERSECTION MARKINGS	SIGHT DISTANCE IMPROVEMENTS
#1 - Roadway Surface Hazards for Bikes 3 X #2 - A Tale of Portland Bridges 7 X X #3 - Lighting in the Knapps Hill Tunnel 2 X X #4 - Back-in Diagonal Parking with Bike Lanes 3 X X	INTERSECTION	SIGHT DISTANCE IMPROVEMENTS
#1 - Roadway Surface Hazards for Bikes 3 X #2 - A Tale of Portland Bridges 7 X X #3 - Lighting in the Knapps Hill Tunnel 2 X X #4 - Back-in Diagonal Parking with Bike Lanes 3 X X	INTERSECT	SIGHT DIST.
#1 - Roadway Surface Hazards for Bikes 3 X #2 - A Tale of Portland Bridges 7 X X #3 - Lighting in the Knapps Hill Tunnel 2 X X #4 - Back-in Diagonal Parking with Bike Lanes 3 X X	INTERS	SIGHT (
#1 - Roadway Surface Hazards for Bikes 3 X #2 - A Tale of Portland Bridges 7 X X #3 - Lighting in the Knapps Hill Tunnel 2 X X #4 - Back-in Diagonal Parking with Bike Lanes 3 X X	LN I	SIG
#2 - A Tale of Portland Bridges 7 X X #3 - Lighting in the Knapps Hill Tunnel 2 X X #4 - Back-in Diagonal Parking with Bike Lanes 3 X X X		
#3 – Lighting in the Knapps Hill Tunnel 2 X X #4 – Back-in Diagonal Parking with Bike Lanes 3 X X X		
#4 – Back-in Diagonal Parking with Bike Lanes 3 X X X		
TO TATIONION OFFICE MOUND DICK OFFICE TO CONTINUE OF THE CONTI		
#6 – Shoreline Park Expansion Project — Provision of Bicycle and 4 X X		
Pedestrian Enhancements		
#7 – Bicycle Treatments on a Former Pedestrian Mall 8 X X X X X X X X X X X X X X X X X X		
#9 – Establishing Bike Lanes—Chicago's Streets for Cycling Plan 6		
#10 – How Hampshire Street Pavement Markings Influence Bicycle 1		
and Motor Vehicle Positioning		
#11 – Raised Bicycle Lanes and Other Traffic Calming Treatments 6		
#12 – Floating Bike Lanes in Conjunction with Part-time Parking 6 X X X X X		
#13 – Incorporating a Bicycle Lane through a Streetcar Platform 1 X		
#14 – Red Shoulders as a Bicycle Facility 2		
#15 – Conversion of 14-foot-wide Outside Lanes to 11-foot Travel 5		
Lanes with a 3-foot Undesignated Lane #16 – Preferential Transit-Bicycle Lanes on Broadway Boulevard 4 X X X X		
#10 – Trecelental Halist-Dicycle Lanes on Bloadway Bodievald 4 X X X X X X		
#18 – Contraflow Bicycle Lanes on Urban Streets 4 X X X		
#19 – Left Side Bike Lanes on One-Way Streets 5 X X X X		
#20 – Curb Radii/Curb Revisions 1 X		
#21 – Combined Bicycle Lane/Right-Turn Lane 4 X X	X	
#22 – Blue Bike Lanes at Intersection Weaving Areas 2 X	X	
#23 – Crossing an Arterial on an Offset Intersection: Bicycle-Only 2 X X Center-Turn Lane	X	
#24 – Improving Sight Distance between Cyclists and Motorists 7 X	Х	Х
#25 – Grandview Drive Roundabout and Corridor Improvements X X X		
#26 – Innovative Application of the Bike Box 2	Х	
#27 – Comprehensive Maintenance Planning for Bicycle Facilities 8 X X X X X X X X X X X X X X X X X X		
#28 – Road Hazard Identification Project 2 X #29 – Bikeway Speed Humps 2		
#30 – Speed Cushions for the Evergreen Corridor Bike Lane Project 1		
#31 – Neighborhood Mini Traffic Circles 1		
#32 – Bicycle Boulevards—Bryant Street Example 5		
#33 – Planning, Designing and Implementing a Shared-Use Path 3		
#34 – Path and Roadway Intersections 7 X X X X		X
#35 – Grade Separated Crossing Treatments 3 X #36 – Share the Trail: Minimizing User Conflicts on Non-motorized 3		
Facilities		
#37 – Shared Lane Markings 2 X		
#38 – Bicycle Detection Program 3		
#39 – Bicycle Signal Heads 3 #40 – Bedestries (Visuale Consequelly Circula) (Helf Circula)		
#40 - Pedestrian/Bicycle Crosswalk Signals (Half-Signals) 2 #41 - Share the Road Sign Initiative 1		
#42 – Placement of 20-mph School Zone Signs 2		
#43 – Shared-Use Arrow 4 X		
#44 – Enforcement for Bicycle Safety 2		
#45 – Bicycling Ambassadors and Bike Lane Education 3		
#46 – Comprehensive Child Bicycle Safety Program 2		
#47 – Share the Road: Motorist/Bicyclist Traffic Education and 3 Enforcement Programs		
#48 – Hitching Posts for Bicycle Parking 2		
#49 – Bicycle Access on Caltrain		
#50 – Bike and Bus Program 1		
#51 – Mapping for Bicyclists 1		
#52 - Commuter Coach: Commuter Bicyclist Recruiting 2		
#53 – Bike to Work Promotion 4		
#55 – Bicycle Destination Signing System 2		
#56 – Urban Forestry 1		
#57 – Raising Funds for Bicycle Safety Programs through Specialty 1		
License Plates #58 – A Transit Oriented Development Financial Incentive 2		
Program — A Tool to Encourage More Bicycling and Walking		

TURNING RESTRIC- TIONS	MERGE AREA REDE- SIGN		MAJOR MAINTE- NANCE	HAZARD IDENTIFICA- TION PROGRAM	MINI CIRCLES	CHICANES	SPEED TABLES/ HUMPS/CUSHIONS	VISUAL NARROWING	TRAFFIC DIVERSION	RAISED INTERSEC- TION	SEPARATE SHARED USE PATH	PATH INTERSECTION TREATMENTS	INTERSECTION WARN- ING TREATMENTS	SHARE THE PATH TREATMENTS	INSTALL SIGNALL/ OPTIMIZE TIMING	BIKE-ACTIVATED SIGNAL	SIGN IMPROVEMENTS	PAVEMENT MARKING IMPROVEMENTS	SCHOOL ZONE IM- PROVEMENTS	LAW ENFORCEMENT	BICYCLIST EDUCA- TION	MOTORIST EDUCA- TION	PRACTITIONER EDU- CATION	BIKE PARKING	TRANSIT ACCESS	BICYCLIST PERSONAL FACILITIES	BIKE MAPS	WAYFINDING	EVENTS/ACTIVITES	AESTHETICS/LAND- SCAPING
	X	Х		Х							Х						Χ	X												
																	Х													
															Х		^													
											Х																			X
							Х	X		Х							Х			Х	X	Х	Χ	Х						X
		Χ	Χ																				Χ				Х		Χ	
						Х		X		Х																				Х
						^		^		^							v	v												^
																	X	X												
								X										Х												
																	Х													
															Х			v												
																	X	X												
																	Х													
																	Χ	Х												
												X			X		X	X	Х											
		X	Χ	Х													X	Х												
		X		Х	V		V																							
					Х		X																							
X					X				Х						X		Х													
											X	X	v	Χ		v														v
											Х	X	X		X	X	X													X
														Х						Х	Х									
															X	Χ		Х			Х									
																X X	Χ													
															٨		Χ													
																		Х	X	Х	X	Х								
																				Χ	Х	Х	X						Х	
																				\/	Х	Х								
																				Х	X	Х								
																								X	Х					X
																					Х				Χ		Х			
				.,																	Х	.,					^		X	
				X																	X	Х					Х		X	
																	Χ				Х							Χ		Х
																													X	^
																													Х	Х