

# 2022–2023 Community Mobility Planning and Implementation Set-Aside

### **Project Application Form**

#### APPLICATION OVERVIEW

The Community Mobility Planning and Implementation (CMPI) Set-Aside Call for Projects opened on April 22, 2021. This is a two-step application process that includes/requires the submittal of a letter of intent followed by an application. If you did not submit a letter of intent for your project and have not had a discussion with DRCOG staff, it is not eligible at this time. Applications are due no later than 5 PM on June 30, 2021. Please submit your application to Derrick Webb at <a href="mailto:dwebb@drcog.org">dwebb@drcog.org</a>.

- Projects requiring CDOT and/or RTD concurrence must provide their official response with this
  application submittal. Please reach out to them by June 11.
- The application must be affirmed by the department director AND either the applicant's City or County Manager or Chief Elected Official (Mayor or County Commission Chair) for local governments. An agency director or equivalent is sufficient for other applicants.
- Further details on project eligibility, evaluation criteria and selection process are defined on the **Community Mobility Planning and Implementation** webpage.
- If you are submitting more than one project for consideration, please submit a separate application for each.
- If you have any questions, please reach out to Derrick Webb (<a href="mailto:dwebb@drcog.org">dwebb@drcog.org</a>) or Josh Schwenk (<a href="mailto:jschwenk@drcog.org">jschwenk@drcog.org</a>).

### **APPLICATION OUTLINE**

## Part 1 | Project Information

Applicants will enter basic information for their *project/plan* (hereafter referred to as *project*) in Part 1, including a Problem Statement, project description, and concurrence documentation from CDOT and/or RTD, if applicable. Part 1 will not be scored.

# Part 2 | Evaluation Criteria, Questions and Scoring

This part includes sections for the **applicant to provide qualitative and quantitative responses** to use for scoring projects. To learn more about how projects will be scored, please see the eligibility rules and selection process document at <a href="https://www.drcog.org/cmpi">www.drcog.org/cmpi</a>.

Part 1		Project Information					
1.	Project Title			Boulder Speed Limit Setting and Signing Framework			
2.	Project Type			Planning			
3.	Project Start/End points or Geographic Area Provide a map with submittal that includes the planning area or project location.			City of Boulder (citywide)			
4.				City of Boulder			
5.	Project Contact Person, Title, Phone Number, and Email			Ryan Noles, Senior Transportation Planner, <u>nolesr@bouldercolorado.gov</u> , (720) 564-2396			
6.		=	_	t-of-Way, involve a CDOT roadway, D involvement to operate service?	Yes No  If yes, provide applicable concurrence documentation with submittal (please use prepared form)		
7.	submit a letter of support from the where the project is located. Have			evernment applicants are required to applicable local government(s) you have met/corresponded with the ject is located and attached letter(s)	Yes No N/A  If yes, please attach Letter(s) of Support.		
			2019 Safe Streets Boulder Report, pg. 23				
8.	What plann	ing s) identifies r this plan or	<u>20</u>	2019 Transportation Master Plan, pg. 14			
	· · · · · · · · · · · · · · · · · · ·		DRCOG Regional Vision Zero High-Injury Network and Critical Corridors				
	project?			Provide link to document/s and referenced page number/			
			This plan or project is not associated with a planning document.				
9.	Project Ove	rview (concise	e abstract	: limited to 500 characters)			
The City of Boulder's Speed Limit Setting and Signing Framework will help the city develop a consistent, objective approach to setting speed limits on the city's collector, minor arterial, and major arterial streets. The framework will also provide guidance to transportation staff on where and how frequently to place speed limit signs. This project will help the city standardize its approach to speed limits, which it has already initiated through the recent "20 Is Plenty" project that lowered the default citywide speed limit to 20 mph (which impacted locally classified streets).							
e s c u T	Speeding is a serious concern that the City of Boulder addresses through various engineering, enforcement, and education initiatives under the umbrella of the Vision Zero program. The <u>Safe Streets Boulder Report</u> identifies speeding as one of five overrepresented factors in serious injury crashes in Boulder. The framework will create a context-sensitive approach to speed limit setting accounting for various factors including street classification, land use, population density, crash history, observed speeds, and street design (lane widths, bike lanes, sidewalks, etc.). The city's overall goal is to create a public-facing speed limit setting practice that will balance existing conditions with <u>Transportation Master Plan</u> policy goals.						
ir	The proposed project will evaluate and build on several recent developments in speed limit setting and signi including the <u>City of Seattle's recent efforts</u> to lower speed limits citywide to help meet its Vision Zero goal, National Association of City Transportation Officials' (NACTO) City Limits speed limit guidance, and recently						

published research completed by the National Cooperative Highway Research Program (NCHRP). The project will ensure that the framework will reference MUTCD standards and can withstand legal concerns. The project components will include:

- an evaluation of these efforts and other relevant efforts/programs from peer cities,
- a comprehensive review of speed limits, vehicle speeds, and street design elements (lane widths, bike lanes, sidewalks, etc.) on collectors, minor arterials, and major arterials,
- recommendations for speed limit adjustments on DRCOG's High Injury Network and Critical Corridors,
- a decision-making matrix for setting speed limits on other city streets, and
- guidance on speed limit sign placement to help reduce vehicular speeds.

The Speed Limit Setting and Signing Framework will primarily support the CMPI Set-Aside goal of supporting a transportation system that is safe, reliable, and well maintained by creating consistency in speed limit setting. This consistency will reinforce expectations of appropriate travel speeds on city streets to balance the needs of all road users. The project is a critical component of a comprehensive approach to speed management in the city, which will support livability and healthy/active transportation choices by reducing vehicular speeds that increase the risk and actual occurrence of serious injury and fatal crashes.

The City of Boulder hopes that this project will serve as a bridge between a national movement to lower speed limits and local concerns over how to appropriately set speed limits. The City expects that this project will be useful to other Front Range communities as Boulder has elements of suburban, urban, and rural land uses that exist in other cities and towns in the DRCOG region.

**10. Project Description**. Describe your project and what it is going to do. Do not include background information or justification language. Please only include details specific to the work that will occur as part of this project. (limited to 1,500 characters)

The Speed Limit Setting and Signing Framework project will create guidance on speed limits for staff in the Transportation Operations and Capital Projects Divisions of Boulder's Transportation and Mobility Department. The project will result in a guidance document that staff can use in responding to requests to lower speed limits (which have increased since the "20 Is Plenty" project) and setting appropriate speed limits when constructing capital improvements. This document will also help staff determine how frequently to place speed limit signs, which may affect driving behaviors and benchmark vehicular speeds.

The project will conduct a review of existing law, standards, guidance, and best practices in North America, including the Colorado Revised Statues and Boulder Revised Code, the MUTCD, recent documents and studies published by organizations like NACTO and NCHRP, and best practices from peer agencies like the City of Seattle Department of Transportation. The project will also work closely with the Colorado Department of Transportation (CDOT) to review agency practices and recommendations for speed limit setting on the state highway system within Boulder city limits.

From this review, the project will develop guidance on decision-making when setting speed limits on city streets. This framework will account for various context-specific factors, including street classification, land use and population density, pedestrian and bicycle activity, existing multimodal transportation facilities, planned bicycle and pedestrian routes and/or facilities, crash history, observed and/or estimated speeds and traffic volumes, street design (lane widths, bike lanes, sidewalks, sight distances, etc.), as well as consideration of additional micromobility options (e-scooters and e-bikes), which are set to become more prevalently used on Boulder's street and path system. The framework will provide staff guidance on speed limit setting for city streets based on these factors; one potential format for this guidance may be a decision-making matrix that shows appropriate speed limit ranges per street classification or category (reflecting the factors listed above). The project may also lead to a reevaluation of street classifications (e.g., local, collector, arterial) on a per-case basis, but this will not be a specific deliverable of the project.

The guidance will be applied in two primary ways: first, staff will use the guidance to make decisions about lowering speed limits as requests are made by Boulder residents. This is a frequent and growing request, following the "20 Is Plenty" project that lowered the default speed limit on city streets to 20 mph unless

otherwise posted (effectively, all local streets in Boulder). The "20 Is Plenty" project also lowered the signed speed limit to 20 mph on local, residential streets that had a posted 25 mph limit. Following "20 Is Plenty," many residents have inquired about lowering speed limits on streets that were not impacted by the change, usually collector or minor arterial streets. Staff has found that, historically, speed limit setting has taken place in an ad hoc fashion and sometimes there is not documentation on why a particular speed limit was set. Staff would like to have a consistent approach to speed limit setting when addressing these requests.

Second, staff often considers speed limits during the implementation of capital projects delivered through the city's Neighborhood Speed Management Program (NSMP), Pavement Management Program (PMP), and other capital projects included in the Capital Improvements Program. These projects sometimes change roadway geometry, but in some cases (like in the PMP) the only changes made beyond resurfacing are adjustments to lane and street markings. These projects are typically good opportunities to evaluate existing speed limits, and pair a speed limit change with project components. Having an established framework for setting speed limits will help staff determine when speed limit changes should be considered as a part of capital project delivery and can also inform the extent to which the project design should be influenced by an ideal speed limit (design speed).

Finally, the project will review best practices for the placement of speed limit signs. Some recent studies suggest that more frequent speed limit sign placement can lead to better speed limit compliance and lower benchmark vehicular speeds (50th and 85th percentile speeds). The project will help staff determine if more frequent signing is appropriate on different types of streets (local, collector, arterial) and if there is a positive cost-benefit scenario in using speed limit signs as a speed reduction strategy.

The project will include a vigorous stakeholder engagement process, with CDOT staff being invited to serve on the project team. Other important stakeholders will include Boulder's Transportation Advisory Board (TAB), Community Cycles, and the Boulder Chamber of Commerce (which recently merged with Boulder Transportation Connections).

The final deliverable of the project will be a guidance document that city staff will use to guide decision-making on speed limit setting and signing for streets in the City of Boulder's jurisdiction. City staff recognizes that CDOT has the authority to set speed limits on the state highway system and will tailor the project's recommendations and deliverables to this prerequisite.

**11. Project Innovation.** Briefly describe any innovative features of the proposed project. *Example: Project elements haven't been implemented in the region, project reaches new market, project has potentially transferrable products.* 

Speed limits are typically set at the jurisdiction of a city's traffic engineer or by code (e.g., the Colorado Revised Statues), but new ways of approaching speed limits and how they are set are emerging in the transportation planning and engineering fields. The City of Boulder believes that it is in a unique position to be a leader in speed limit setting and signing at a regional, statewide, and national level due to the recent "20 Is Plenty" project and local interest in reducing vehicular speeds. The deliverable of this project, a comprehensive, context-sensitive speed limit setting guidance, can be a model for other municipalities in Colorado and the US. Specifically, this project will be useful to a diversity of Front Range communities as Boulder has elements of suburban, urban, and rural land uses that exist in other cities and towns in the DRCOG region.

- **12.** Define the **scope** and **specific elements** of the project. For planning projects, please include any stakeholder events and deliverables under specific tasks. Each task should start with a title and follow with a description.
  - Task 1: Review of Existing City and State Law, Standards, and Guidance (MUTCD, NACTO, ITE) on Speed Limits
  - Task 2: Review of Best Practices from Other Municipalities
  - Task 3: Context-Specific Factors and Transportation Data Analysis
  - Task 4: Speed Limit Setting Decision-Making Guidance
  - Task 5: Speed Limit Sign Placement Recommendations

<b>13.</b> Would a smaller amount than requested be acceptable, while maintaining the original intent of the project?	☐ Yes ⊠ No				
If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each, if the project is scalable.					
<b>14.</b> Please confirm you have completed and attached the <b>CDOT Risk Assessment Form</b> .  Yes, I have completed and attached the CDOT Risk Assessment Form					
15. Please confirm with your initials that you have read and understand the expectations outlined in eligibility rules and selection process document; that you will ensure a DRCOG staff member is included in project					

management-level meetings; and that project deliverables will be transmitted to DRCOG upon completion if

# A. Project Financial Information and Funding Request

the project is selected for funding.

1.	1. Total Project Cost						
2.	<b>Total amount of DRCOG Request</b> <i>Maximum is 82.79% of total project cost per federal match requirements.</i>	\$103,488	82.79% of total project cost				
3.	Outside Funding Partners List each funding partner/source and contribution amount.	\$\$ Contribution Amount	% of Contribution to Overall Total Project Cost				
	City of Boulder	\$21,512	17.21%				
		\$					
		\$					
		\$					
		\$					
		\$					
То	tal amount of funding provided by other funding partners (private, local, state, regional or federal)	\$21,512					

Funding Breakdown (by year)							
			FY 2022	FY 2023	Total		
Federal Funds			\$	\$103,488	\$103,488		
State Funds			\$	\$	\$0		
Local Funds			\$	\$21,512	\$21,512		
Total Funding			\$0	\$103,488	\$21,512		

4. By checking this box, the applicant's Chief Elected Official (Mayor or County Commission Chair) or City/County Manager or Executive Director AND Department Director, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded.



# Part 2 Evaluation Criteria, Questions and Scoring

### A. Project type, collaboration and innovation

Provide <u>qualitative and quantitative</u> responses to the following questions on the significance of the proposed project and multi-jurisdictional or multi-agency collaboration.

- 1. Why is this project important?
  - The <u>Safe Streets Boulder Report</u> identifies speeding as one of five overrepresented factors in serious injury crashes in Boulder. To meet its Vision Zero goal, the City of Boulder is actively working to improve safety on city streets and setting speed limits is a component of this work. With emerging approaches on speed limit setting across North America, and community desire for safer, multimodal streets, this project will create a document that considers and balances various factors in setting speed limits that staff can use moving forward. The engagement component of this project will aim to produce a guidance that has support from various stakeholders representing different interests and perspectives on appropriate speed limits for streets in the city's jurisdiction.
- 2. Does the proposed project cross and/or benefit multiple municipalities? If yes, which ones and how?

  The project will be applicable to streets within the City of Boulder's right-of-way and under City jurisdiction. City staff expect that the final deliverable can be used as a model for other cities interested in this approach to speed limit setting.
- **3.** Does the proposed project include **multi-agency collaboration**? If yes, which agencies will be involved and how will the outcome impact them?
  - Yes, the proposed project will require collaboration with the Colorado Department of Transportation. The City will also invite the Regional Transporation District (RTD) to participate on the stakeholder committee.
- 4. What aspects of this project are innovative?
  - The City of Boulder does not currently have a documented guidance or framework for setting speed limits beyond the conditions of the <u>Boulder Revised Code</u>. Speed limit setting is reserved at the discretion of the city's Principal Traffic Engineer, but with various perspectives on vehicular speeds and the effect of speed limits, it will be beneficial to the Department of Transportation and Mobility to create guidance on speed limit setting with input from stakeholders. Furthermore, with different factors effecting the use and function of different streets, a comprehensive approach to decision-making will lead to consistency in speed limit setting across the city transportation system. This is an innovative approach to speed limit setting, which has largely been handled on a case-by-case basis.
- **5.** What **transportation-related problem** will this project address? How will the proposed project address the specific problem?
  - This project will address the problem of vehicular speeding, particularly on streets that tend to have higher rates of pedestrian and bicycle travel and for which implementing speed management strategies is more challenging. The final deliverable of the project will directly influence speed limit setting on streets with existing and new operations, which will affect the safety and comfort of more vulnerable street users.

**6. For planning projects**: what will the completion of this project lead to? Please describe specific outcomes (ordinance development, policy adoption, project list, etc.) of this planning project.

The project will lead to a guidance document that will assit the city's transporation engineers in speed limit setting and placing speed limit signs on city streets.

**7. For small infrastructure projects**: where did the need for this project originate? Is this project identified in a previous plan or study?

N/A

#### **B. CMPI Set-Aside Goals**

Provide <u>qualitative</u> and <u>quantitative</u> responses to the following questions on how the proposed project addresses the set-aside goals.

1. Describe how the project will support diverse, livable communities.

The project will support diverse, livable communities by addressing vehicular speeds on city streets, evaluating where speed limits can be changed to promote more comfortable pedestrian and bicycle travel through slower vehicluar traffic. A comprehensive, citywide approach will help set expectations for appropriate travel speeds by street classification/type, and will be supported the city's speed reduction strategies like the <a href="Photo Radar">Photo Radar</a> <a href="Enforcement">Enforcement</a> and <a href="Neighborhood Speed Management Programs">Neighborhood Speed Management Programs</a> (NSMP). According to the <a href="AARP Livability Index">AARP Livability Index</a>, vehicle speeds are slighlty higher in Boulder than the median US neighborhood; furthermore, demand for traffic calming has never been higher, with nearly 40 locations awaiting projects through the NSMP.

2. Describe how the project will support the development of connected urban centers and multimodal corridors.

The Speed Limit Setting and Signing Framework will create a guidance document for setting speed limits on streets with adjacent urban land uses. The decision-making function of the guidance will account for urban activity and population density in recommended speed limit ranges. This document will influence actual vehicular speeds through the application of its recommendations to existing streets and ones that may be rebuilt or reorganized through a capital project. As the City implements more multimodal facilities on city streets, having a well-defined approach to speed limits will be important in decreasing speeding and promoting multimodal travel.

3. Describe how the project will support a transportation system that is well-connected and serves all modes of travel.

This project will strive to create an approach to speed limit setting that balances efficiency and access for all modes of transportation by not focusing on mode-specific factors (e.g., the 85th percentile alone), but comprehensive ones that include multiple transportation modes, land uses, population density and activity. With 96 miles of bike lanes in the Boulder Valley and nearly 15% of commuters walking to work (pre-COVID 19), setting speed limits to factor in pedestrians and cyclists is an important goal of the Speed Limit Setting and Signing Framework.

4. Describe how the project will support healthy and active choices.

The project will create guidance on setting speed limits with the surrounding <u>built and natural environment</u> as an factor in decision-making. With much of the urban environment in Boulder being urban and or suburban, population densities and multimodal transportation activity (including existing and planned facilities) will inform speed limit recommendations. This approach to speed limit setting will support healthy and active choices by not only including these modes in the speed limit setting process, but by promoting slower speed profiles on streets where healthy and active transportation is prioritized.

5. Describe how the project will expand access to opportunity for residents of all ages, incomes and abilities.

Through creating a speed limit setting practice that accounts for the complexity of city streets (particularly in denser neighborhoods) and promotes multimodal travel, this project will help residents of all ages, incomes and abilities access opprtunites citywide. For example, the area around the University of Colorado includes an average 42% of people below poverty, with 31% of people having no access to a vehicle (2018 5-year American Community Survey). With lower incomes and less access to vehicles in the area, the project will help improve the safety and comfort of more affordable transportation options like walking, biking, and transit by supporting slower speeds on streets where people who do not drive need to travel.

6. Describe how the project will support a transportation system that is safe, reliable and well maintained.

In its 2017 safety study Reducing Speeding-Related Crashes Involving Passenger Vehicles, the National Transportation Safety Board (NTSB) identifes speed limits as one of five safety issues that pertain to addressing speeding. The report states that "despite being recognized as an effective method to control driving speeds, there is no standard approach to seeting or adjusting speed limits in the United States" (pg. 21). The overarching goal of Boulder's Speed Limit Setting and Signing Framework is to standardize the city's approach to speed limits and to control for speeds through a practice that does not rely primarily on the 85th percentile speed, which has been shown to reinforce increases in vehicle speeds (pg. 24). This project assumes that reducing speeds by setting limits to reflect multimodal goals and the complexity of city streets will enhance safety. Furthermore, the speed limit sets the legal basis for speed management activities like enforcement and traffic calming. This goal-focused approach to speed limit setting will provide a foundation for Boulder's efforts to improve safety and reliable mulitmodal travel citywide.

### C. Priority Emphasis Areas

Provide <u>qualitative and quantitative</u> responses to the following questions on how the proposed project addresses the priority emphasis areas. NOTE: Projects that address one or more priority emphasis area are likely to be more competitive during this round.

- **1.** Describe how the project will **plan for or implement active transportation** as exemplified in DRCOG's Active Transportation Plan.
  - The project will plan for streets with multimodal oriented speed limits, helping to control vehicular speeds and thereby making active transportation safer and more comfortable for walking, biking, and transit. Speeding is a well-established contributing factor in severe injury and fatal crashes for pedestrians and cyclists (NTSB Report, pgs. 7 8).
- 2. Describe how the project will plan for or implement safety as exemplified in DRCOG's Taking Action on Regional Vision Zero, DRCOG/CDOT's Safer Main Streets program, or CDOT's Strategic Transportation Safety plan. The Speed Limit Setting and Signing Framework will plan for creating context-appropriate speeds as highlighted in DRCOG's Taking Action of Regional Vision Zero report (pg. 11). The report states that the "Vision Zero approach is to design and operate roads to achieve context-appropriate vehicle speeds that protect all roadway users," and highlights the correlation between higher speeds and a higher liklihood of a fatal or serious crash. Boulder's Speed Limit Setting and Signing Framework will plan for context-sensitive speed limits that effect the operation of city streets, and will be used during capital project design for the intended use of the street post-construction (to eliminate a disconnect between the design speed and posted speed limit).
- 3. Describe how the project will plan for or implement improvements and transit-supportive land use along regional Bus Rapid Transit corridors identified in the 2050 Metro Vision Regional Transportation Plan.

  By creating a framework for setting speed limits on multimodal streets, the project will promote transit-supportive land uses along Bus Rapid Transit corridors. With slower operating vehicle speeds, transit users may feel more comfortable accessing transit on streets where a Bus Rapid Transit line is located. Furthermore, reduced vehicle speeds will lead to less severe crashes where pedestrians may be crossing streets to access transit lines.