

# STP (FFY2020-2024) Program Application Booklet

Draft for Discussion 8/8/2018

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# 1 Introduction

2 The Chicago Metropolitan Agency for Planning (CMAP), the metropolitan planning  
3 organization for the seven counties of northeastern Illinois, announces the availability of  
4 funding for transportation projects through the STP Shared Fund. This program is funded  
5 through the Federal Highway Administration (FHWA). The STP Shared Fund is designed to  
6 fund important regional projects that address regional performance measures and the goals of  
7 ON TO 2050.

## 8 Eligible Applicants and Projects

9  
10 Projects eligible for the STP Shared Fund make large and lasting contributions to regional  
11 transportation priorities. The intention of the fund is also to encourage collaboration between  
12 municipalities and advance projects that local councils cannot readily fund on their own. Given  
13 these goals, projects must meet one of two eligibility requirements:

- 14  
15 • Joint application from at least 3 local partners, including at least one municipality
- 16  
17 • Total project cost of \$5 million or more

OR

18  
19 For the STP Shared Fund, eligible sponsors or partners include any state agency or unit of  
20 government having the authority to levy taxes. Sponsors include but are not limited to  
21 municipalities, counties, townships, park districts, forest preserve districts, and transit agencies.  
22 Partners must demonstrate financial or in-kind project involvement. Private for-profit and non-  
23 profit organizations may partner with a public sponsor that meets the previously stated  
24 conditions, but may not submit applications or act as the lead agency for project  
25 implementation.

### 26 27 **Eligible project types**

28 While STP has very broad eligibility in comparison to other funding sources (CMAQ, TAP,  
29 HSIP), the STP shared fund is targeted toward the following priority project types:

- 30  
31 • **Road reconstructions**  
32 Projects that address condition deficiencies on the road network and do not add  
33 roadway capacity
- 34  
35 • **Transit station rehabilitation/reconstructions**  
36 Projects that enhance the existing transit system by improving or reconstructing transit  
37 stations
- 38  
39 • **Bridge rehabilitation/reconstructions**  
40 Projects that address condition deficiencies on the region's bridges
- 41  
42 • **Highway/rail grade crossing improvements**  
43 Projects that reduce delay at highway/rail crossings, through grade separation or other  
improvements
- 44  
45 • **Road expansions**  
46 Projects that add capacity to an existing road or involve construction of a new road

- 44 • **Bus speed improvements**
- 45 Projects that improve the speed and reliability of bus travel in the region
- 46 • **Corridor-level or small area safety improvements**
- 47 Projects that address safety issues
- 48 • **Truck route improvements**
- 49 Projects that improve truck movement through a corridor or area

50  
 51 These project types were chosen because of demonstrated demand in the form of unfunded or  
 52 partially funded local projects, stakeholder input, ON TO 2050 implementation priorities, and  
 53 an assessment of opportunities to leverage or fill gaps between other available fund sources.  
 54

55 **Rolling focus for STP funding**

56  
 57 The 2019 call for projects for the shared fund will be used to build a full five-year program (FFY  
 58 2020-2024), and projects in all priority project types are encouraged to apply. Subsequent  
 59 semiannual calls will be to fill the out years of the program. Given the limited funding available  
 60 in future calls and wide range of eligible project types, future calls will focus on a subset of  
 61 project types (see the table below).  
 62

	First call (2019)	Second call (2021)	Third call (2023)	Fourth call (2025)
		<i>Draft: update based on outcome of first call for projects</i>		
<b>Program years:</b>	2020-2024	2025-2026	2027-2028	2029-2030
<b>Focus areas:</b>	ALL FOCUS AREAS ELIGIBLE	Grade crossing improvements	Road expansion	truck route improvements
		Road reconstruction	Bridge replacement/reconstruction	Road reconstruction
		Bus speed improvements	Corridor/small area safety improvements	Transit station improvement

63  
 64

65 **Eligible Project Phases and Required Match**

66 ***Phase I Engineering***

67 Phase I engineering will be the responsibility of the project sponsor to complete without  
68 funding from the STP Shared Fund. With limited exceptions, all other phases -- including phase  
69 II engineering, right-of-way acquisition, and construction (including construction engineering) -  
70 - are eligible for STP Shared Fund funding. Sponsors may request STP Shared Fund funding for  
71 phase I engineering based on a hardship. If phase I engineering funding is sought, funding for  
72 the later phases of the project cannot be requested until the next call for projects, and such  
73 funding is not guaranteed. Sponsors seeking funding for phase I engineering should contact  
74 CMAP staff before doing so. Hardship is determined from an evaluation of municipal median  
75 income, tax base per capita, total tax base, and population. A list of municipalities meeting the  
76 phase I engineering hardship exemption is available at <link to be added>.

77

78 ***Remaining Phases***

79 All eligible phases will be programmed at a maximum level of 80 percent federal funding for  
80 STP Shared Fund funding.

81

82 For projects requiring phase I engineering, one of the following must occur by **June 1, 2019**:

83

a. Design approval has been received.

84

b. IDOT has certified that a final Project Development Report has been submitted  
85 for signatures.

86

c. IDOT has certified that a preliminary Project Development Report has been  
87 received with an accurate cost and clear scope established.

88 For transit station improvement projects, the sponsor must demonstrate that sufficient  
89 engineering and/or architectural work has been completed to establish accurate costs and a clear  
90 scope.

91

92 ***Local Match***

93 The sponsor must have already committed matching funds when the project is submitted.  
94 Proposals which indicate that the sponsor will pay more than the minimum local match will  
95 receive points as part of the project readiness portion of the scoring process (see below). Local  
96 match is a minimum of 20 percent of the total funds being requested. The local match does not  
97 necessarily have to be provided directly by the sponsor but it must be a non-federal source to  
98 qualify as match.

99 **Project Selection Process**

100 The program of projects selected by the STP Project Selection Committee will consider the results of the project evaluation in three categories:  
 101 project readiness, transportation impact, and planning factors (see table below). Programmed projects will be subject to Active Program  
 102 Management procedures (detailed separately)

Project types	Project readiness			Transportation impact			Planning factors				
	Engineering/ROW completion	inclusion in plans	financial commitments	current condition/need	improvement	Jobs/housing benefit	green infrastructure	freight movement	inclusive growth	complete streets	transit supportive density
Highway/rail grade crossing improvements							5	-	10	10	-
Truck route improvements							5	-	10	10	-
Road expansions							5	5	10	5	-
Road reconstructions							5	5	10	5	-
Bridge rehab/reconstructions	10	10	5	20	20	10	-	5	10	10	-
Corridor-level or small area safety improvements							-	5	10	10	-
Transit station rehab/reconstructions							-	-	10	5	10
Bus speed/reliability improvements							-	-	10	5	10
	<b>Maximum: 25</b>			<b>Maximum: 50</b>			<b>Maximum: 25</b>				
<b>Total: 100 + Council/CDOT support bonus</b>											

103 **Project Readiness**

104 CMAP and partners are committed to timely obligation and completion of projects to protect  
105 the region’s funding from lapse and rescission, and deliver on the significant transportation  
106 benefits of selected projects. The Active Program Management policies provide a framework for  
107 strong project and program management of selected projects, and the evaluation process for  
108 Shared Fund projects complements these policies by awarding points to projects that  
109 demonstrate financial commitment, local planning, and engineering work.

110 **Engineering and Right of Way Acquisition**

111 Projects can receive up to 10 points, 5 if they demonstrate substantial completion of phase II  
112 engineering and 5 for the completion or lack of need for right of way acquisition. Sponsors need  
113 not have submitted pre-final plans to IDOT, but should be able to demonstrate that engineering  
114 is 85%-90% complete.

115 **Inclusion in Local/Agency Plans**

116 Projects can receive up to 10 points if they are included in local or agency plans. Acceptable  
117 plans include long range transportation plans, ITS plans, transit agency long range plans,  
118 capital improvement plans, and other local planning efforts, including those completed with  
119 CMAP LTA assistance. Projects receive 7 points if they are specifically named in the plan, and 3  
120 points if the plan offers more general support for the project type.

121 **Financial Commitment**

122 Projects can receive up to 5 points in this category based on their demonstrated leveraging of  
123 other funding sources. Points are awarded as follows to projects based on the amount of  
124 funding requested from the shared fund as a percent of federally-eligible share of the total  
125 project cost:

126	Less than 20%	5 points
127	20%-40%:	4 points
128	40%-60%:	3 points
129	60%-80%:	2 points
130	80%-100%:	1 point

131

132 **Transportation Impact**

133 A project’s transportation impact score is worth 50% of the total project score, and measures the  
134 existing condition of the transportation asset or need for the project, the cost effectiveness of the  
135 improvement that would be made by the project, and the number of households and jobs that  
136 could benefit from the project’s completion.

137 **Existing Condition/Need**

138 Each project will receive an existing condition/need score on a scale of 0 to 20. Each project type  
139 will have a different measure of project need, but all will be converted to a 20 point scale for the  
140 purposes of analysis. Scores will be calculated as follows:

141

142 *Transit station reconstructions/rehabs*

143 The existing condition score will be the cost-weighted average [Transit Economic Requirements](#)  
144 [Model \(TERM\)](#) condition score of station components, converted to a 20 point scale. For station  
145 reconstructions that increase passenger area, 25% of this score will be based on the extent of the  
146 existing capacity constraint.

147

148 *Bus speed improvements*

149 The existing condition score will measure the current on-time performance of bus routes being  
150 improved as well as the difference between bus travel time and auto travel time on the road(s)  
151 being improved. Both factors are worth 50% of the score.

152

153 *Bridge reconstruction*

154 The existing condition score will be the sufficiency rating calculated by the [National Bridge](#)  
155 [Inventory](#), converted to a 20 point scale.

156

157 *Rail-Highway grade crossing*

158 The existing condition score will be the project's score from the total points from the Grade  
159 Crossing Screening Level 2 evaluation (currently being finalized, see current data [here](#)),  
160 converted to a 20 point scale.

161

162 *Corridor/Small Area Safety*

163 The safety need score is calculated using IDOT's safety road index (SRI) for roadway segments  
164 and intersections. The SRI score is based on the location's [Potential for Safety Improvement](#)  
165 (PSI) score. IDOT developed SRI scores for local and state routes and categorized them by peer  
166 group into critical, high, medium, low, or minimal. Within each peer group, locations  
167 categorized as critical have the highest PSIs, and locations categorized as minimal are less likely  
168 to have safety benefits from treatments. The proposed project's safety need score will be the  
169 highest SRI category along the project location. This will include both segment and intersection  
170 locations.

171

172 *Road reconstructions, expansions and truck routes*

173 The road reconstructions and expansions need score will be calculated in a similar method to the  
174 [highway needs score](#) for regionally significant projects in ON TO 2050. This score incorporates  
175 information about pavement condition, safety, reliability, and mobility. Pavement condition is  
176 the length weighted average of either the road's Condition Rating Score (CRS) or international  
177 roughness index (IRI), depending on data availability. Mobility is the length weighted average of  
178 the [travel time index](#) (the ratio of peak period travel time to free flow travel time) and the number  
179 of [at least lightly congested hours of traffic per weekday](#). Reliability is measured by the length-  
180 weighted average of the [planning time index](#) (95<sup>th</sup> percentile travel time divided by free flow

181 travel time). The safety score will be calculated using IDOT’s safety road index (SRI). Weights for  
 182 these factors will be as follows:  
 183

	road reconstruction	road expansion
condition	50%	15%
mobility	10%	30%
reliability	20%	30%
safety	20%	25%

184  
 185 The truck routes need score will be calculated in a similar method to the road reconstruction  
 186 and expansion score, with the addition of a length weighted average of truck volumes. All  
 187 factors are weighted equally.

188 **Improvement**

189 Improvement will be calculated as the cost effectiveness of the proposed improvements  
 190 involved in the project. Improvements will be indexed on a scale of 0-20 within project type.  
 191 Total project cost will be used to evaluate cost effectiveness. The improvements for each project  
 192 type will be calculated as described below:  
 193

194 *Transit station reconstructions/rehabs*

195 The difference in cost-weighted average [Transit Economic Requirements Model \(TERM\)](#)  
 196 condition score of station components before and after the project. For station reconstructions  
 197 that increase passenger area, 25% of this score will be based on the extent that the project  
 198 addresses an existing capacity constraint.  
 199

200 *Bus speed improvements*

201 The improvement to on-time performance of bus routes being improved as well as the change  
 202 in the bus-auto travel time differential. Both factors are worth 50% of the score.  
 203

204 *Bridge reconstruction*

205 The bridge sufficiency rating, adjusted based on the type of work being done and the functional  
 206 class of the road. Adjustment factors based on [IDOT’s major bridge program](#).  
 207

208 *Rail-Highway grade crossing*

209 The improvement to delay and safety as a result of the project.  
 210

211 *Corridor/Small Area Safety*

212 This score is based on the improvement of the project and the planning level expected safety  
 213 benefit (reduction of crashes) after implementing the improvement. The planning level safety  
 214 improvement score is modeled after the [SMART SCALE Safety Factor Evaluation](#) method  
 215 developed by the Virginia Department of Transportation (VDOT). Similar to VDOT’s method,  
 216 CMAP staff will develop a list of common improvement types (countermeasures) and the  
 217 accompanying planning level CRFs. The planning level CRFs will be developed using  
 218 information from IDOT, Crash Modification Clearinghouse, and Highway Safety Manual.  
 219 CMAP staff will review project details to determine the relevant countermeasure and the

220 assigned planning level CRF for that countermeasure. If multiple countermeasures are part of  
 221 the project, CMAP staff will take the maximum planning level CRF for the project.

222

223 *Road reconstructions, expansions, and truck routes*

224 Ten of the improvement points for road reconstructions and enhancements will come from  
 225 improvements to the condition in the case of road reconstructions and mobility in the case of  
 226 expansions. Projects can also receive a maximum of ten points if the project has any of the  
 227 following characteristics or helps implement any of the following as part of a larger program:

228

<i>Systematic Improvements</i>	<b>Score</b>
Integrated Corridor Management	5
Work zone management (traveler information improvements)	5
Truck travel information systems	4
Strategies to improve transit on-time performance	4
Ramp metering	4
Road weather management systems	2
Special event management	3
Traffic signal interconnect	4
Adaptive signal control	5
<i>Incident Detection:</i>	
Traffic Management Center (TMC) to TMC Communications	4
Computer-aided dispatch (911 call center) to (TMC) communications	4
Extension or improvement of real-time traffic surveillance on regional expressways and tollways, including video and detectors	3
Integration of real-time probe data into incident detection procedures	3
Establishment of detector health program	3
<i>Incident Response:</i>	
Expansion of response operations capabilities (e.g., minutemen)	5
Dispatch improvements, including center-to-operator and supervisor-to-operator communications (including supervisor-bus communications)	4
Response equipment (e.g., minuteman vehicles)	4
<i>Incident Recovery:</i>	
Expediting coroner's/medical examiner's accident investigation process	5
Dynamic message signs (DMS, multiple, including arterial DMS)	3
Incident-responsive ramp meters	3
Speed Management Systems	2
On-scene communication, coordination, and cooperation	2
Development and improvement of highway closure detour routes	2

229

230

231 **Household/Job Impact**

232 The benefits of a transportation project often cross municipal and county borders, and can  
233 provide significant improvements to people who are not located in the project's immediate  
234 vicinity. For each project, CMAP uses the travel model to generate a travel shed of the places  
235 people come from and go to using the facility. The score in this category is calculated by adding  
236 up the total number of jobs and households in each project's travel shed and converting the  
237 total to a score out of 10, indexed to the other submitted projects  
238

239 **Planning Factors**

240 In addition to the transportation benefits and readiness scores explained above, all projects are  
241 evaluated on their support for regional priorities, identified as part of [ON TO 2050](#), the region's  
242 long range comprehensive plan.  
243

244 **Inclusive growth (all project types)**

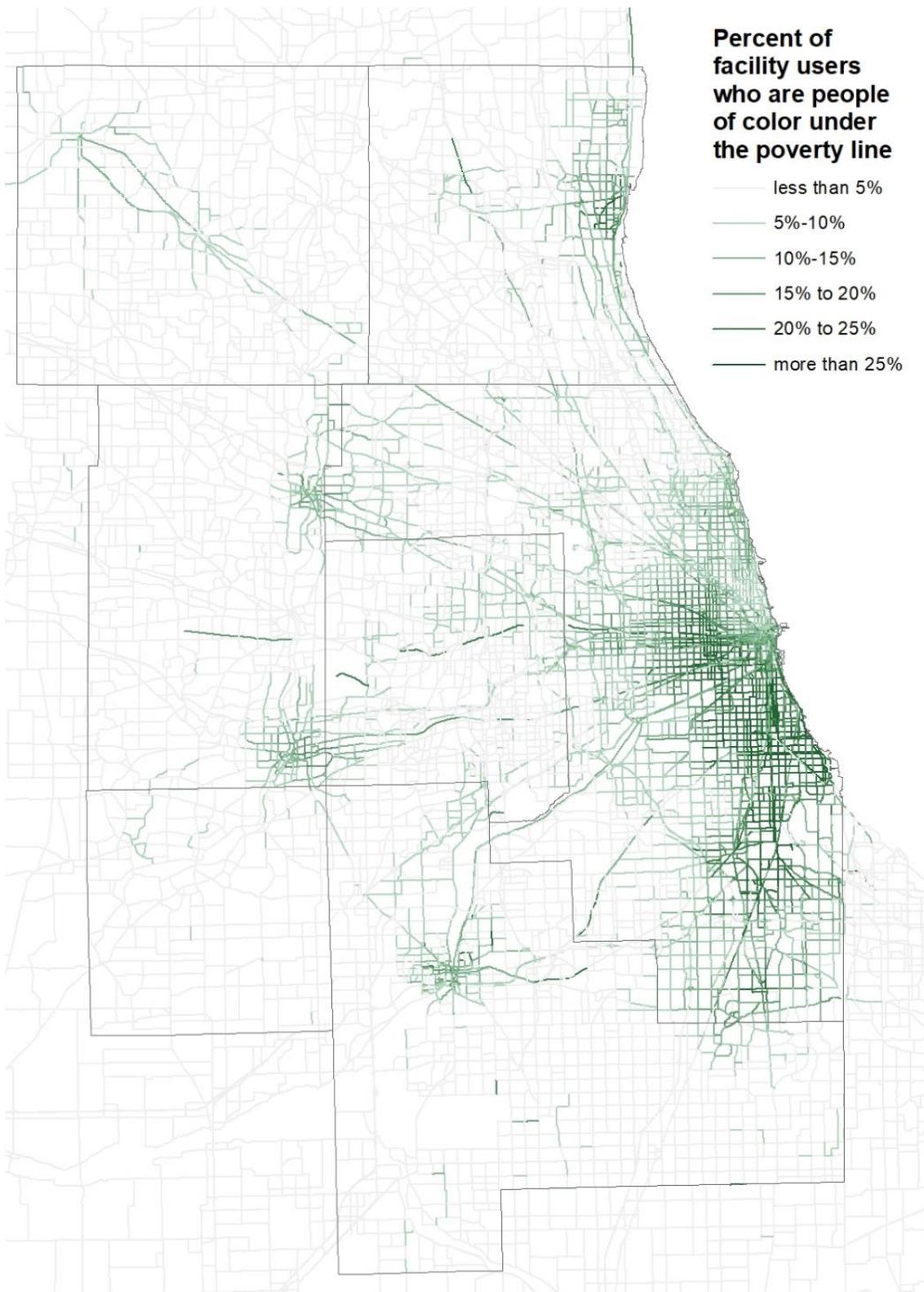
245 Long-term regional prosperity requires economic opportunity for all residents and  
246 communities. [Inclusive growth, one of the ON TO 2050 plan principles](#), focuses on strategies,  
247 including transportation investments, that can increase access to opportunity for low income  
248 residents and people of color, and help the region to be stronger and more successful  
249 economically.  
250

251 All projects are evaluated based on the percent of travelers using a facility that are people of  
252 color below the poverty line, as modeled by the CMAP travel demand model. Projects can  
253 receive a maximum of 10 points, which are awarded as follows (also see draft map below,  
254 which shows both roads and facilities):  
255

256 **Percent of facility users who are nonwhite and under poverty line**

257	0%-5%	0 points
258	5%-10%:	2 points
259	10%-15%:	4 points
260	15%-20%:	6 points
261	20%-25%:	8 points
262	25% or more:	10 points

263



264

265 ***Complete streets (all project types)***

266 One of ON TO 2050's recommendations is to [support development of compact, walkable](#)  
 267 [communities](#). Complete streets policies require streets to be planned, designed, operated, and  
 268 maintained to enable safe, convenient, and comfortable travel and access for all anticipated

269 roadway users, regardless of their age, abilities, or mode of travel. The adoption of complete  
 270 streets policies and incorporation of complete streets design elements into all projects is  
 271 encouraged. A project receives half of the points in this category if the project sponsor has  
 272 adopted complete streets policies, and the other half if the project contains complete streets  
 273 elements. For more information about complete streets policies and project design, see the  
 274 [CMAP complete streets toolkit](#). Transit station, bus speed improvement, road reconstruction,  
 275 and road expansion projects can receive a total of 5 points in this category (2.5 from policies, 2.5  
 276 from project elements), while grade crossings, bridge reconstructions, safety projects, and truck  
 277 routes can receive a maximum of 10 points (5 from policies, 5 from project elements)  
 278

279 **Green infrastructure (grade crossings, truck route improvements, road reconstructions**  
 280 **and road expansions)**

281 Implementing green infrastructure as part of transportation investments can help achieve a  
 282 number of regional priorities, including reducing flooding, improving water quality, and  
 283 mitigating the urban heat island effect. The maximum score in this category is 5 points, 2.5 if  
 284 sponsors have implemented policies that support green infrastructure, 2.5 if the project has  
 285 green infrastructure components.

286 **Freight movement (road expansions, road reconstructions, bridge rehab/reconstructions,**  
 287 **and safety projects)**

288 Maintaining the region’s status as North America’s Freight hub is one of the recommendations  
 289 of ON TO 2050. While some of the shared fund priority project types are specifically aimed at  
 290 improving freight movement in the region (rail-highway grade crossings, and truck route  
 291 improvements), other project types can also have substantial freight benefits. Projects receive  
 292 points in this category as follows based on the truck volume on the road segment:  
 293

294 **Percent heavy duty vehicles:**

295	0%-2%	0 points
296	2%-4%:	1 points
297	4%-6%:	2 points
298	6%-8%:	3 points
299	8%-10%:	4 points
300	10% or more:	5 points

303 **Transit-supportive land use (transit stations and bus route improvements)**

304 ON TO 2050 includes the recommendation to [make transit more competitive](#). Transit agencies  
 305 cannot sustain fast, frequent, reliable service without accompanying supportive land use  
 306 changes. Transit investments receive points if they are located in areas where zoning and urban  
 307 design requirements are transit-supportive. This will be scored as follows:

Max Score	Criteria
7	Up to 4.5 points will be awarded based on the permitted density for residential and non-residential land uses within one-half mile of the transit station. If more than one residential or non-residential classification is zoned

Max Score	Criteria																		
	<p>within the station area, points will be assigned to the classification with the highest permitted density.</p> <p>Points will be assessed based on both residential <i>and</i> non-residential densities. If the two categories yield different point totals, the average of the two point totals will be awarded.</p> <p><b>Permitted Densities:</b></p> <table border="1" data-bbox="532 464 1305 743"> <thead> <tr> <th data-bbox="532 464 824 541">Residential (DU/buildable acre)</th> <th data-bbox="833 464 1114 541">Non-Residential (Building Height*)</th> <th data-bbox="1122 464 1305 541">Points</th> </tr> </thead> <tbody> <tr> <td data-bbox="532 541 824 583">&lt; 6</td> <td data-bbox="833 541 1114 583">1 story (12 ft.)</td> <td data-bbox="1122 541 1305 583">0</td> </tr> <tr> <td data-bbox="532 583 824 625">&gt; 6 and ≤ 10</td> <td data-bbox="833 583 1114 625">2 story (24 ft.)</td> <td data-bbox="1122 583 1305 625">1.0</td> </tr> <tr> <td data-bbox="532 625 824 667">&gt; 10 and ≤ 16</td> <td data-bbox="833 625 1114 667">3 story (36 ft.)</td> <td data-bbox="1122 625 1305 667">2.0</td> </tr> <tr> <td data-bbox="532 667 824 709">&gt; 16 and ≤ 24</td> <td data-bbox="833 667 1114 709">4 story (48 ft.)</td> <td data-bbox="1122 667 1305 709">3.0</td> </tr> <tr> <td data-bbox="532 709 824 743">&gt; 24</td> <td data-bbox="833 709 1114 743">&gt; 4 story (&gt; 48 ft.)</td> <td data-bbox="1122 709 1305 743">4.5</td> </tr> </tbody> </table> <p>*Building height given in feet based on 12 feet per story.</p> <p>AND</p> <p>Up to 2.5 points will be awarded based on <b>innovative parking requirements</b>, which supports denser development by increasing space available for other uses (one point for each strategy implemented):</p> <ul data-bbox="467 989 1317 1255" style="list-style-type: none"> <li>• Reduced minimum parking requirements</li> <li>• Enacted maximum parking requirements</li> <li>• Shared parking permitted</li> <li>• In-lieu parking fees permitted</li> <li>• Enacted bicycle parking requirements</li> <li>• Off-street parking is required behind or underneath buildings</li> <li>• Off-street parking is permitted off-site</li> </ul>	Residential (DU/buildable acre)	Non-Residential (Building Height*)	Points	< 6	1 story (12 ft.)	0	> 6 and ≤ 10	2 story (24 ft.)	1.0	> 10 and ≤ 16	3 story (36 ft.)	2.0	> 16 and ≤ 24	4 story (48 ft.)	3.0	> 24	> 4 story (> 48 ft.)	4.5
Residential (DU/buildable acre)	Non-Residential (Building Height*)	Points																	
< 6	1 story (12 ft.)	0																	
> 6 and ≤ 10	2 story (24 ft.)	1.0																	
> 10 and ≤ 16	3 story (36 ft.)	2.0																	
> 16 and ≤ 24	4 story (48 ft.)	3.0																	
> 24	> 4 story (> 48 ft.)	4.5																	
3.0	<p>Up to 3 points will be awarded for the <b>presence of mixed-use zoning</b> within one-half mile of transit project (1 point for each strategy implemented):</p> <ul data-bbox="467 1381 1412 1654" style="list-style-type: none"> <li>• Zoning allows vertical mixing of uses (e.g., residential units above ground-level retail or office).</li> <li>• Zoning allows pedestrian-friendly diverse land uses (e.g., drugstores, groceries, dry cleaning, banks, restaurants, gyms, hardware stores, etc.).</li> <li>• Zoning excludes car-dependent land uses (e.g., drive-through stores, strip malls, etc.).</li> </ul> <p>Communities that have implemented form-based codes may require additional qualitative analysis from CMAP staff to ensure their zoning meets the above standards.</p>																		

309 **Bonus**

310 Each council and CDOT will have 25 points to allocate amongst the submitted projects to  
311 indicate local support and priorities. No project may receive more than 15 of any one council or  
312 CDOT's points, but collaboration amongst councils is encouraged. Councils may give bonus  
313 points to projects outside their jurisdiction up to a maximum of 25 total bonus points for any  
314 one project. Councils and CDOT must submit allocations of bonus points to CMAP by a  
315 deadline yet to be determined, but in advance of the release of initial evaluation results.

DRAFT