PROJECT PRIORITY RATING FOR STP PROJECTS

Project:	**Task Force Status:**
Limits:	**Date:**

I. PLANNING CONSIDERATIONS	**20 Possible Points**

A.	**Importance of Project in the System**	**16 Points**	**POINTS**
	1. National Functional Classification	(3)	
	2. Consistency with SEMCOG 20 Yr. Plan	(1)	
	3. Improvement in System continuity	(3)	
	4. Improvement in Lane Consistency	(2)	
	5. Pavement Classification	(2)	
	6. Urban Boundary	(2)	
	7. Impact of R.O.W. acquisition	(3)	
B.	**Coordination with Other Modes**	**4 Points**	
	1. Coordination with Transit	(2)	
	2. Coordination with Non-Motorized	(2)	

II. ENGINEERING CONSIDERATIONS	**80 Possible Points**

A.	**Crash Reduction**	**35 Points**	**POINTS**
	1. Decrease Crash Frequency	(10)	
	2. Decrease Crash Rate	(10)	
	3. Decrease Crash Severity	(15)	
B.	**Improved Physical Roadway Conditions**	**25 Points**	
	1. Improvement in Base	(3)	
	2. Improvement in Drainage	(3)	
	3. Improvement in Lane Width	(2)	
	4. Improvement in Pavement Surface	(7)	
	5. Improvement in Curb/Shoulder	(4)	
	6. Improvement in Roadside Obstacle Clearance	(2)	
	7. Improvement in Passing Sight Distance	(2)	
	8. Improvement in Stopping Sight Distance	(2)	
C.	**Improved Traffic Operations**	**20 Points**	
	1. Congestion Reduction Under Existing Traffic Levels	(7)	
	2. Congestion Reduction Under Future Traffic Levels	(5)	
	3. Improvement in Driveway Conflicts	(2)	
	4. Improvement in Lane Balance	(2)	
	5. Improvement in Turning Movements	(2)	
	6. Improvement in Roadside Park Conflicts	(2)	

TOTAL POINTS:	

I. PLANNING CONSIDERATIONS (20 Possible Points)

A. Importance of Project in the System (16 Possible Points)

1. National Functional Classification (3)

Rate the project according to the functional Classification of the roadway. The three categories and their point totals are as follows:

Classification	Points
- Principal Arterial	3
- Minor Arterial	2
- Collector	1
- Local (Not Eligible for this Program)	-

2. Consistency with SEMCOG 20 Year Plan (1)

Is the project currently shown in the SEMCOG Long Range Transportation Plan? If the project is not currently a part of the plan, then the project sponsor must obtain an amendment to add it to the Plan prior to being eligible for federal-aid funding. Preservation projects without any capacity improvements are eligible as fulfilling a policy goal of the SEMCOG plan and need not be individually listed in the Plan.

Category	Points
- Consistent with Long Rang Plan	1
- Non Consistent with Long Range Plan (Not Eligible for this Program)	-

3. Improvement in System Continuity (3)

Rate the project according to whether it adds to the continuity of the road network or completes the system or corridor.

Category	Points
- Completes System	3
- Adds to Continuity	2
- Does Neither	0

4. Improvement in Lanes Consistency (2)

Rate the project according to whether the consistency of the number of lanes is improved. This would be the filling of lane gaps along links or lane consistency in and out of intersections.

Category	Points
- Eliminates Inconsistency	2
- Improves Lane Consistency	1
- Does Neither	0

5. Pavement Classification (2)

Rate the project according to its existing pavement classification for truck traffic. Please submit a copy of your community's official truck operator's map if points are taken.

Category	Points
- All Weather	2
- Class A	1
- Class B	0

6. Urban Boundary (2)

Rate the project according to whether or not it falls within the urban boundary, as shown on the National Functional Classification Map.

Category	Points
- Within Urban Boundary	2
- Not within Urban Boundary	0

7. Impact of Right-of-Way Acquisition (3)

Rate the project on the extent of right-of-way required to complete the project.

Right-of-Way Needed	Points
- No Right-of-Way Needed	3
- Right-of-Way needed but no relocation assistance	1
- Relocation assistance needed	0

B. Coordination with Other Modes (4 Possible Points)

1. Coordination with Public Transit (2)

This involves all types of work on road segments utilized byline haul buses operating on fixed routes which will enhance better public transportation service. Among other things, it could involve bus shelters, bus turnouts or park and ride lots. Provide a copy of SMART transit map to document this issue.

Category	Points
- New Improvements for Public Transit	2
- Line Haul Bus Route	1
- No Public Transportation	0

2. Coordination with Non-Motorized Modes (2)

This involves the construction of new non-motorized facilities, such as segments of sidewalks and bike pathways, or providing curb drops where they do not exist.

Category	Points
- New sidewalk or pathway construction	2
- Improves current non-motorized modes	1
- No improvements to non-motorized modes	0

II. ENGINEERING CONSIDERATIONS	80 Possible Points

A.	Crash Reduction	35 Points

Rate the location to be improved according to the Crash frequency, rate and severity reduction. Link projects and intersection projects are to be ranked separately. For purposes of evaluating intersection projects, crashes within 200 feet of the center of the intersection are to be considered.

Attach a copy of the most recent traffic volume count used to calculate the crash rate for the project.

Calculate the percent expected Crash reduction by using ACCREDUC, the computer program available from the Road Commission for Oakland County. Attach the printout from ACCREDUC.

FACTORS:

Crash Frequency:
The average annual number of Crashes during a three (3) year period at an intersection or link.

Crash Rate:
Crashes per million vehicle miles for links or per million vehicles in the case of an intersection based on a three (3) year period.

Crash Severity:
The average annual number of Crashes during a three (3) year period resulting in a personal injury or fatality.

LINKS

1. Decrease Link Crash Frequency (10)

		Existing Crash Frequency / Mile Factors			
Reduction	**Factor**	**(47+)**	**(28 to <47)**	**(9 to <28)**	**(<9)**
90 – 100%	10				
80 - < 90%	9	1.0	0.75	0.50	0.25
70 - < 80%	8				
60 - < 70%	7				
50 - < 60%	6				
40 - < 50%	5				
30 - < 40%	4				
20 - < 30%	3				
10 - < 20%	2				
0 - < 10%	1				

_____ x _____ = _____ Points
Reduction Factor Existing Crash Factor

2. Decrease Link Crash Rate (10)

		Existing Crash Rate Factors			
Reduction	**Factor**	**(14+)**	**(8.5 to <14)**	**(3.2 to <8.5)**	**(<3.2)**
90 – 100%	10				
80 - < 90%	9	1.0	0.75	0.50	0.25
70 - < 80%	8				
60 - < 70%	7				
50 - < 60%	6				
40 - < 50%	5				
30 - < 40%	4				
20 - < 30%	3				
10 - < 20%	2				
0 - < 10%	1				

_____ x _____ = _____ Points
Reduction Factor Existing Crash Factor

3. Decrease Link Crash Severity (15)

		Existing Crash Severity Factors			
Reduction	**Factor**	**(24+)**	**(13.2 to <24)**	**(2.5 to <13.2)**	**(<2.5)**
90 – 100%	15				
80 - < 90%	13	1.0	0.75	0.50	0.25
70 - < 80%	11				
60 - < 70%	9				
50 - < 60%	7				
40 - < 50%	5				
30 - < 40%	4				
20 - < 30%	3				
10 - < 20%	2				
0 - < 10%	1				

_____ x _____ = _____ Points
Reduction Factor Existing Crash Factor

INTERSECTIONS

1. Decrease Intersection Crash Frequency (10)

		Existing Crash Frequency / Mile Factors			
Reduction	**Factor**	**(43+)**	**(27 to <43)**	**(12 to <27)**	**(<12)**
90 – 100%	10				
80 - < 90%	9	1.0	0.75	0.50	0.25
70 - < 80%	8				
60 - < 70%	7				
50 - < 60%	6				
40 - < 50%	5				
30 - < 40%	4				
20 - < 30%	3				
10 - < 20%	2				
0 - < 10%	1				

_____ x _____ = _____ Points
Reduction Factor Existing Crash Factor

2. Decrease Intersection Crash Rate (10)

		Existing Crash Rate Factors			
Reduction	**Factor**	**(6.3+)**	**(4.0 to <6.3)**	**(1.6 to <4.0)**	**(<1.6)**
90 – 100%	10				
80 - < 90%	9	1.0	0.75	0.50	0.25
70 - < 80%	8				
60 - < 70%	7				
50 - < 60%	6				
40 - < 50%	5				
30 - < 40%	4				
20 - < 30%	3				
10 - < 20%	2				
0 - < 10%	1				

_____ x _____ = _____ Points
Reduction Factor Existing Crash Factor

3. Decrease Intersection Crash Severity (15)

		Existing Crash Severity Factors			
Reduction	**Factor**	**(29+)**	**(16.3 to <29)**	**(3.4 to <16.3)**	**(<3.4)**
90 – 100%	15				
80 - < 90%	13	1.0	0.75	0.50	0.25
70 - < 80%	11				
60 - < 70%	9				
50 - < 60%	7				
40 - < 50%	5				
30 - < 40%	4				
20 - < 30%	3				
10 - < 20%	2				
0 - < 10%	1				

_____ x _____ = _____ Points
Reduction Factor Existing Crash Factor

B.	Improved Physical Roadway Conditions	25 Points

1. Improvement in Base (3)

Determine points for expected repair to soil, base and sub-base according to the table below.

Corrective Action	Points
- Base repair and subgrade undercutting with edge drain installation.	3
- Base repair and subgrade undercutting.	2
- Base repair only.	1
- No Base work.	0

2. Improvement in Drainage (3)

Determine points for expected drainage improvement according to the table below. Corrective actions include: Rebuilding and/or complete replacement of existing drainage structures, repair of damaged structures, and/or improving system outlet. Lid adjustment for overlay thickness does not qualify as drainage improvement.

Existing Deterioration as a Percent of Drainage System Being Improved	Points
- 70% - 100%	3
- 50% - 74.9%	2
- 25% - 49.9%	1
- $\leq$ 24.9%	0.5
- No Drainage Improvements	0

3. Improvement in Lane Width (2)

Determine the points for lane width improvement according to the table below.

Corrective Action	Points
- Improve Lane Width to: $\geq$ 12 Feet $\geq$ 11 Feet	 2 1
- No Improvement	0

4. Improvement in Pavement Surface (7)

Rate the existing physical condition of the pavement according to the following criteria.

Existing Deterioration as a Percent of Pavement Being Rated	Condition
- < 5%	Good
- 5% to < 25%	Fair
- 25% to < 50%	Poor
- 50% +	Very Poor

Determine the points for pavement improvement according to the table below. Multiply the appropriate Condition Factor by the Corrective Action to determine the rating points.

		Existing Condition Factors			
Corrective Action	**Factor**	**Very Poor**	**Poor**	**Fair**	**Good**
Total Reconstruction	7	1.0	.75	.50	.25
AC Resurfacing (3+")	5				
AC Resurfacing (1.5" - <3")	3				
AC Patching	1				
PCC Overlay (White Topping)	5				
PCC Repairs and Profiling	3				
PCC Repairs	1				
No Pavement Work	0				

_____ x _____ = _____ Points
Corrective Action Existing Condition Factor

5. Improvement in Curb / Shoulder (4)

Rate the existing physical condition of the curbs and/or shoulders according to the following criteria.

Existing Deterioration as a Percent of Curb and/or Shoulder Being Rated	Condition
- < 5%	Good
- 5% to < 25%	Fair
- 25% to < 50%	Poor
- 50% +	Very Poor

Determine the points for curb or shoulder-edge improvement according to the table below. Multiply the appropriate Condition Factor by the Corrective Action to determine the rating points.

		Existing Condition Factors			
Corrective Action	**Factor**	**Very Poor**	**Poor**	**Fair**	**Good**
Construct or replace all curb or pave a minimum 3′ of a minimum 6′ shoulder.	4	1.0	.75	.50	.25
Widen should (8 ft. min.) or replace settled and/or distressed curb segments.	3				
Widen shoulder (6 ft. min.)	2				
Widen shoulder (4 ft. min.)	1				
No curb or shoulder work.	0				

_____ x _____ = _____ Points
Corrective Action Existing Condition Factor

6. Improvement in Roadside Obstacle Clearance (2)

Refer to the AASHTO Roadside Design Guide for definitions of clear zone and crashworthiness. Determine the points for roadside obstacle clearance improvement based on corrective actions noted below.

Corrective Action	Points
- Remove all existing non-crashworthy fixed objects from clearzone	2
- Non—crashworthy fixed objects relocated and those still in clearzone shielded as recommended.	1.5
- Fixed objects shielded as recommended.	1
- No Improvement	0

7. Improvement in Passing Sight Distance (2)

Determine existing passing sight distances using the AASHTO Policy on Geometric Design of Highways (latest edition).

The existing condition is the percentage of no passing zones to the total length of the roadway segment being improved. Calculate by dividing the total length of the double and single yellow lines by the total length of the roadway.

Determine the points for sight distance improvement according tot he table below. Multiply the appropriate factor by the appropriate points to determine the rating points.

		Existing Condition Factors			
Corrective Action	**Factor**	**75-100%**	**50 - <75%**	**25 - <75%**	**< 25%**
- Widen 2 lane road to multi-lane	2	1.0	0.75	0.50	0.25
- Improve to 0-24%	1.5				
- Improve to 25-49%	1				
- Improve to 50-74%	0.5				
- No Improvement or Ex. Multi-Lane	0				

_____ x _____ = _____ Points
Corrective Action Existing Condition Factor

8. Improvement in Stopping Sight Distance (2)

Determine existing stopping sight distances using the AASHTO Policy on Geometric Design of Highways (latest edition).

The existing condition is the percentage of average stopping sight distance compared to that recommended by AASHTO for the ***posted*** speed limit.

Determine the points for stopping sight distance improvement according to the table below. The improvement must include all locations falling below recommended stopping sight distance. Multiply the appropriate Condition Factor by the Corrective Action to determine the rating points.

		Existing Condition Factors			
Corrective Action	**Factor**	**< 75%**	**75 - <85%**	**85 - <95%**	**95 - <100%**
- Improve to 100%	2	1.0	0.75	0.50	0.25
- Improve to 90 - <100%	1.5				
- Improve to 75 - <90%	1				
- Improve to <75%	0.5				
- No Improvement	0				

_____ x _____ = _____ Points
Corrective Action Existing Condition Factor

C.	Improved Traffic Operations	20 Points

1. Congestion Reduction Under Existing Traffic Levels (7)

For this category, the link and intersection projects will have to be rated separately. Determine the level of service using the techniques found in the Highway Capacity Manual (TRB Special Report #209, latest edition). Provide a copy of the traffic data used to perform the analysis. Show all calculation or attach the output reports of software program(s) used for this analysis.

Links are rated according to the existing level of service compared to the expected level of service after the improvements. The intersections are rated according to the critical lane capacity compared to the capacity after the improvement. Determine points using the table below.

Expected Level of Service	Existing Level of Service					
After Improvement:	**F**	**E**	**D**	**C**	**B**	**A**
▪ A	7	5	4	2	1	0
▪ B	5	4	2	1	0	0
▪ C	4	2	1	0	0	0
▪ D	2	1	0	0	0	0
▪ E	1	0	0	0	0	0
▪ F	0	0	0	0	0	0

2. Congestion Reduction Under Future Traffic Levels (5)

For this category, the link and intersection projects are rated separately for the expected level of service after the improvements under traffic volumes projected 20 years into the future. Determine the level of service using the techniques found in the Highway Capacity Manual (TRB Special Report #209, latest edition). Provide a copy of the traffic data used to perform the analysis, and note the basis of the 20 year traffic projection:

- Growth estimated at 3% per year for 20 years (1.806 x existing traffic volumes).
- SEMCOG traffic forecast (Note: This information is available from SEMCOG Information Services, call 313-961-4266).
- Community-sponsored traffic forecast – provide a copy of the forecast analysis.

Show all calculations or attach the output reports of software program(s) used for this analysis.

Links are rated according to the existing level of service before any improvements, compared to the expected level of service 20 years after the improvements. The intersections are rated according to the existing critical lane capacity before any improvement, compared to the expected capacity 20 years after the improvement.

Determine points using the table below.

Expected Level of Service	Existing Level of Service					
20 Years After Improvement:	**F**	**E**	**D**	**C**	**B**	**A**
▪ A	5	4	3	2	1	1
▪ B	4	3	2	1	1	0
▪ C	3	2	1	1	0	0
▪ D	2	1	1	0	0	0
▪ E	1	1	0	0	0	0
▪ F	0	0	0	0	0	0