CAPITAL IMPROVEMENT PROGRAM
City of Missoula CIP Project Request Form FY 2014-20187

Program Category:	Project Title:	12 Project #	13 Project #	14 Project #
Street Improvements	Neighborhood Initiated Traffic Calming	S-01	S-01	S-01

Description and justification of project and funding sources:

These projects demonstrated effectiveness slowing motorized traffic and enhancing non-motorized travel, reducing auto-generated air pollution, improving the Efficiency of traffic flow, and preserving the residential character of neighborhood streets. Finished circles have been installed at more than 40 intersections in the city, most with the help of city CIP funds.

No new applications were received by the February 19, 2013 deadline.

Is this equipment prioritized on an equipment replacement schedule?	Yes	No	NA
			X

Are there any site requirements:

REVENUE

How is this project going to be funded:

Funding Source	Accounting Code	FY14	FY15	FY16	FY17	FY18	Funded in Prior Years
Assessments/residents		37,000	37,000	37,000	37,000	37,000	**212,500**
General Fund			18,000	18,000	18,000	18,000	**106,500**
							50,000
							10,200
		37,000	55,000	55,000	55,000	55,000	**379,200**

EXPENSE

How is this project going to be spent:

Budgeted Funds	Accounting Code	FY14	FY15	FY16	FY17	FY18	Spent in Prior Years
A. Land Cost							
B. Construction Cost		29,600	44,000	44,000	44,000	44,000	194,846
C. Contingencies (10% of B)		2,960	4,400	4,400	4,400	4,400	19,485
D. Design & Engineering (15% of B)		4,440	6,600	6,600	6,600	6,600	29,227
E. Percent for Art (1% of B)							
F. Equipment Costs							
G. Other							
		37,000	55,000	55,000	55,000	55,000	**243,558**

OPERATING BUDGET COSTS

Does this project have any additional impact on the operating budget:

Expense Object	Accounting Code	FY14	FY15	FY16	FY17	FY18	Spent in Prior Years
Personnel							
Supplies							
Purchased Services							
Fixed Charges							
Capital Outlay							
Debt Service							
		-	-	-	-	-	**-**

Description of additional operating budget impact: City participates in traffic calming projects by limited pavement removal, sump moving as needed, engineering, installation of temporary devices, and painting and striping. For FY12 participation is estimated to be $2,000. This amount will be accommodated with existing budgets.

Responsible Person:	Responsible Department:	Date Submitted to Finance	Today's Date and Time	Preparer's Initials	Total Score
Ben Weiss	**Development Services**	**3/8/2013**	4/12/2013 13:05	JSM	46

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Project Rating

(See C.I.P. Instructions For Explanation of Criteria)

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Qualitative Analysis	Yes	No	Comments
1. Is the project necessary to meet federal, state, or local legal requirements? This criterion includes projects mandated by Court Order to meet requirements of law or other requirements. Of special concern is that the project be accessible to the handicapped.		X	Though not legally required, the project will improve air quality, conserve energy, mitigate traffic congestions, improve neighborhood safety.
2. Is the project necessary to fulfill a contractual requirement? This criterion includes Federal or State grants which require local participation. Indicate the Grant name and number in the comment column.		X	
3. Is this project urgently required? Will delay result in curtailment of an essential service? This statement should be checked "Yes" only if an emergency is clearly indicated; otherwise, answer "No". If "Yes", be sure to give full justification.		X	Applicant neighborhoods customarily feel that their traffic improvements are urgently needed.
4. Does the project provide for and/or improve public health and/or public safety? This criterion should be answered "No" unless public health and/or safety can be shown to be an urgent or critical factor.		X	The primary reason residents state for requesting traffic calming is to increase safety on their residential streets. Slowing traffic, especially at intersections, materially improves safety for both motorists and pedestrians. A preliminary survey of crash data for the two years prior and two years after the devices in the University Area shows a reduction from 38 crashes to 17. There were 17 t-bone (right angle crashes) prior, there were 6 after installation, none of which were at intersections with circles.

Quantitative Analysis	Raw Score Range	Comments	Weight	Total Score
5. Does the project result in maximum benefit to the community from the investment dollar?	(0-3) 3	In FY13, no general fund money is proposed. In future fiscal years, at current cost estimates, one requested CIP dollar will leverage at least two residents' dollars. A similar program in Seattle resulted in a 94% reduction in accidents...a high benefit. Traffic calming is neighborhood responsive; a major benefit is improved neighborhood livability and confidence in local government.	5	15
6. Does the project require speedy implementation in order to assure its maximum effectiveness?	(0-3) 2	We receive new requests for traffic calming every year; each request is deemed urgent by the applicant neighborhood.	4	8
7. Does the project conserve energy, cultural or natural resources, or reduce pollution?	(0-3) 1	Air quality will benefit; energy will be conserved; the bicycling/pedestrian environment will be enhanced.	3	3
8. Does the project improve or expand upon essential City services where such services are recognized and accepted as being necessary and effective?	(0-2) 2	With the visible demonstrated success of traffic calming in several locations, other residents are insisting on traffic calming to address their concerns. Many residents feel that managing residential traffic is an essential service. We have been repeatedly asked to make Missoula safer for biking and walking, and reduce the volumes and speeds of traffic on many residential streets.	4	8
9. Does the project specifically relate to the City's strategic planning priorities or other plans?	(0-3) 3	Traffic calming has been a specific planning objective in past City Strategic Plans.	4	12
			Total Score	46

PRELIMINARY COST / BENEFIT ANALYSIS
TRAFFIC CALMING IN MISSOULA

14 Project # S-01

In June, 2001 the City installed traffic circles at nine intersections in the university area, in a pattern of roughly one every other intersection. The total project cost $50,095, of which $18,000 was City funds. During the 31 months prior to installation, there were 36 motor vehicle crashes, of which 18 were right-angle (t-bone) crashes. During the 31 months following installation, there were 17 motor vehicle crashes, of which 5 were right angle (t-bone) crashes.

The "cost value" of a crash varies widely, considering these factors: specifics of the particular crash, costs in a particular part of the state or country, inclusion of appropriate other factors (economic loss, personal injury, property damage, cost of public services such as police or fire, and administrative costs). Mark Monaco of the Missoula Police Department has calculated that an average motor vehicle crash, attended by the Missoula Police, has a total cost of $29,000 – incorporating all the factors above. Pierre Jomini, the Montana Department of Transportation Safety Engineer, uses national cost data: a fatal injury crash ($3 million), an incapacitating injury crash ($210,000), a non-incapacitating injury crash ($42,000), a possible injury crash ($22,000), and a property-damage-only crash ($2300).

In the table below, I've used Monaco's numbers and the very conservative "possible injury crash" numbers from Jomini. We consider two different benefits: total crash reductions, and reduction in the more severe right-angle crashes.

	Pre-circles	Post circles	Per cent reduction	Cost savings per Monaco figures	Benefit/cost (Public cost of $18,000)	Cost savings per Jomini	Benefit/cost (Public cost of $18,000)
Total crashes	36	17	53	$551,000	30:01:00	$396,000	22:01
Right angle crashes	18	5	72	$377,000	21:01	$286,000	16:01

Conclusion: Using the conservative numbers (right angle crashes rather than total crashes, and Jomini's costs rather than Monaco's), the LEAST benefit/cost ration is 16:1.

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