

ZONING

APPENDIX D

TOWNSHIP OF ADAMS, BUTLER COUNTY

RECIPROCAL USER FEE DEFINITION AND CALCULATION

I. Reciprocal user fee defined.

The Adams Township reciprocal user fee is a pro rata cost borne by an owner/developer of land situated within one or more of the six State Route 228 Zoning Overlay Districts, based on the number of p.m. peak hour trips being generated by a selected category of land use per acre multiplied by a unit-cost-per-trip. The unit-cost-per-trip is the product of the number of developable acres in all six overlay zoning districts multiplied by the aggregate average number of commercial land use trips divided into the estimated cost (plus construction year contingencies) of four improved and signalized intersections, which improvements directly benefit the Owner/Developer.

II. Methodology.

The total number of developable acres in each overlay zoning district was determined based on the absence of development constraints, such as steep slopes and wetlands. Secondly, eight land uses listed as permitted in each of the zoning overlay districts were identified and their trip-generating characteristics per 1,000 square feet as per the Institute of Transportation Engineers Trip Generation Manual, Sixth Edition, 1997, were determined based on the permitted intensity of development (lot coverage of structures), by zoning overlay district. Third, an aggregated average number of p.m. peak hour trips projected to be generated per developable acre was derived based on data from the ITE Manual and the overlay zoning district development standards. Fourth, the aggregated total was multiplied by the total number of developable acres in the entire State Route 228 Corridor. The resulting total trip number was then divided into the total estimated costs of engineering and construction, as determined by the Township Engineer, for four signalized, connected via a closed-loop system and improved intersections within the corridor.

UNIT COST PER TRIP							
	T-1	P-1	T-2	T-3	P-2	T-4	
Developable acreage by overlay zone	221	63	39	125	129	35	612 acres
Aggregate average p.m. peak hour trips per acre (8 land uses)	79.7	66.4	79.7	79.7	66.4	79.7	Aggregate average 75.3 trips
Estimated total p.m. peak hour trips (6 overlay zoning districts)	17,614	4,183	3,108	9,962	8,566	27,871	46,083

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Estimated intersection improvement costs (closed loop signals, design and capacity construction)							\$2,589,000.00
Estimated unit cost per trip							\$56.18

The resulting number is the unit-cost-per-trip, which was then grown by an accepted engineering and construction date percentage (4% annually) to accurately represent a projected build-date fee (2-8 years). Said fee will apply to all land development proposals within the State Route 228 Corridor using the overlay zoning use option and benefiting from improvements in those overlay zoning districts.

PROGRAMMED INTERSECTIONS	
Intersection	Construction Year
Myoma Road/RT 228	2002
Beaver Street/RT 228	2005
Crider Road/RT 228	2006
Brickyard Road/RT 228	2008

ESTIMATED COST PER INTERSECTION	
Design engineering	\$15,000.00
Left turn - stacking lane - widening	\$40,000.00
Signage and marking	\$10,000.00
Signalization	\$345,000.00
Interconnection loop	\$119,000.00
Total cost per intersection	\$529,000.00

PROJECTED COST TO CONSTRUCTION DATE	
Intersection	Cost at Build Date
Myoma Road/RT 228	\$572,000.00
Beaver Street/RT 228	\$671,000.00
Crider Road/RT 228	\$620,000.00
Brickyard Road/RT 228	\$726,000.00
Estimated Total	\$2,589,000.00