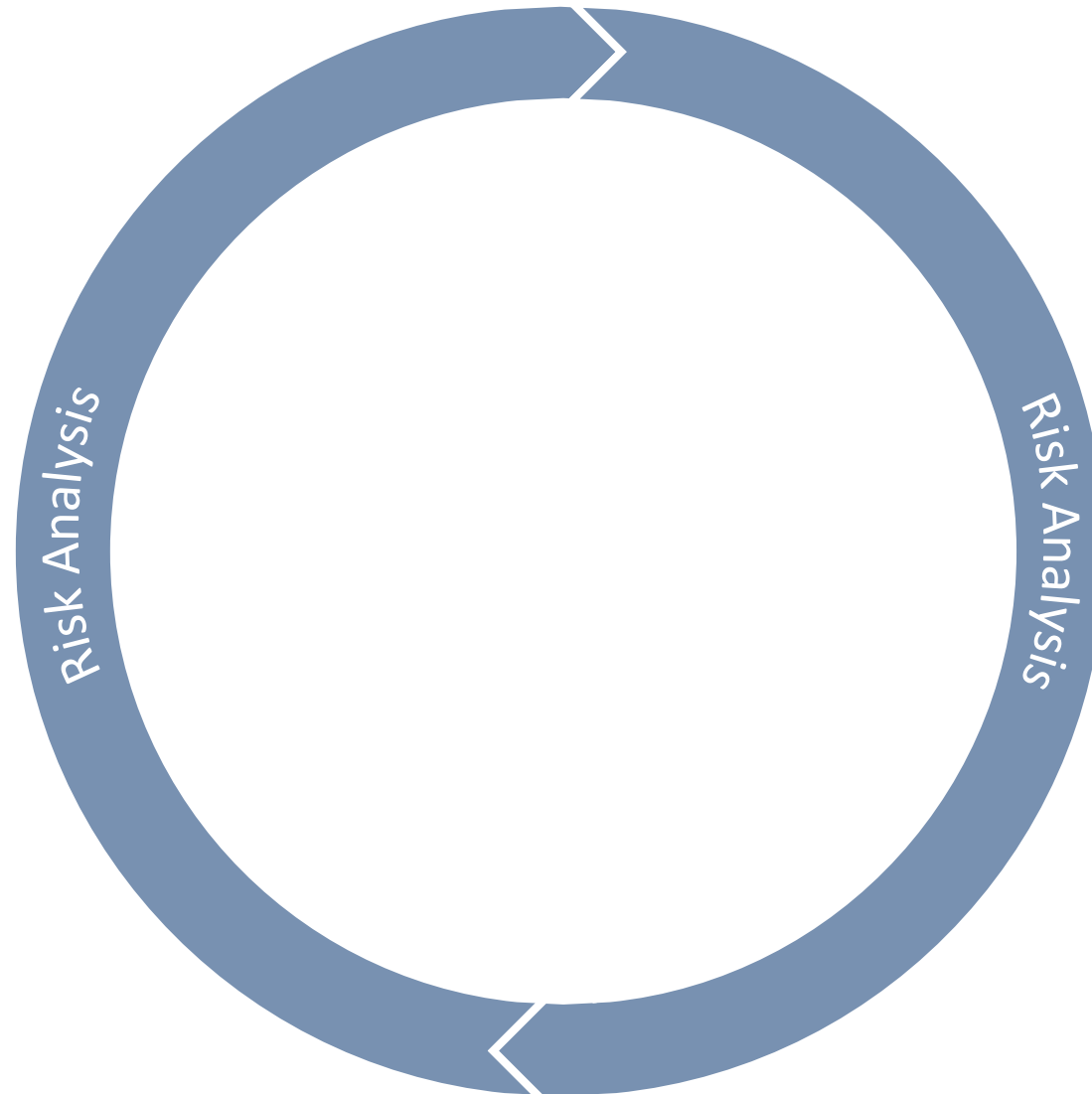




Bringing it All Together – Matt Wilson
SGR/TAM Roundtable
July 17, 2019

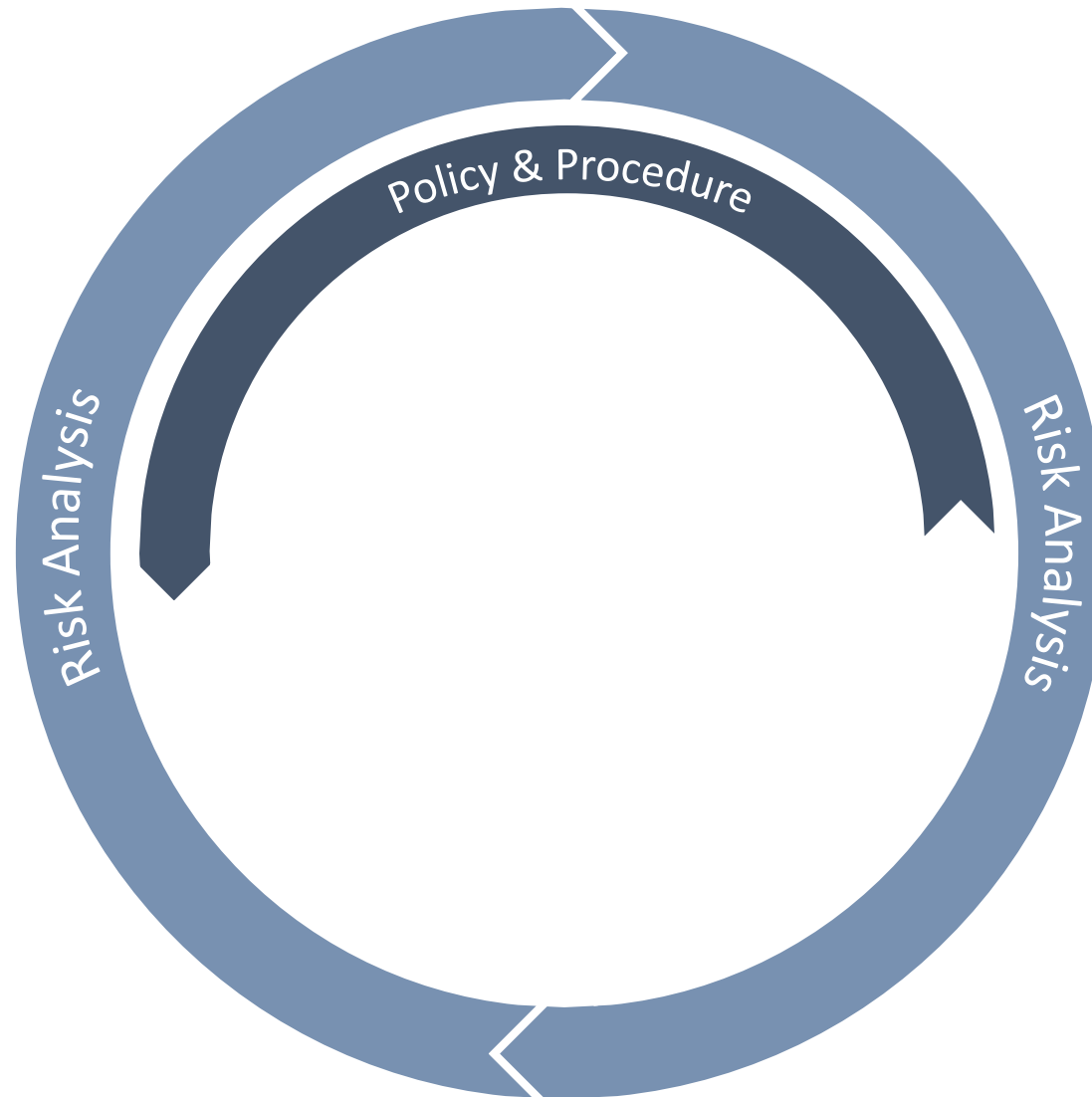


Bringing it All Together



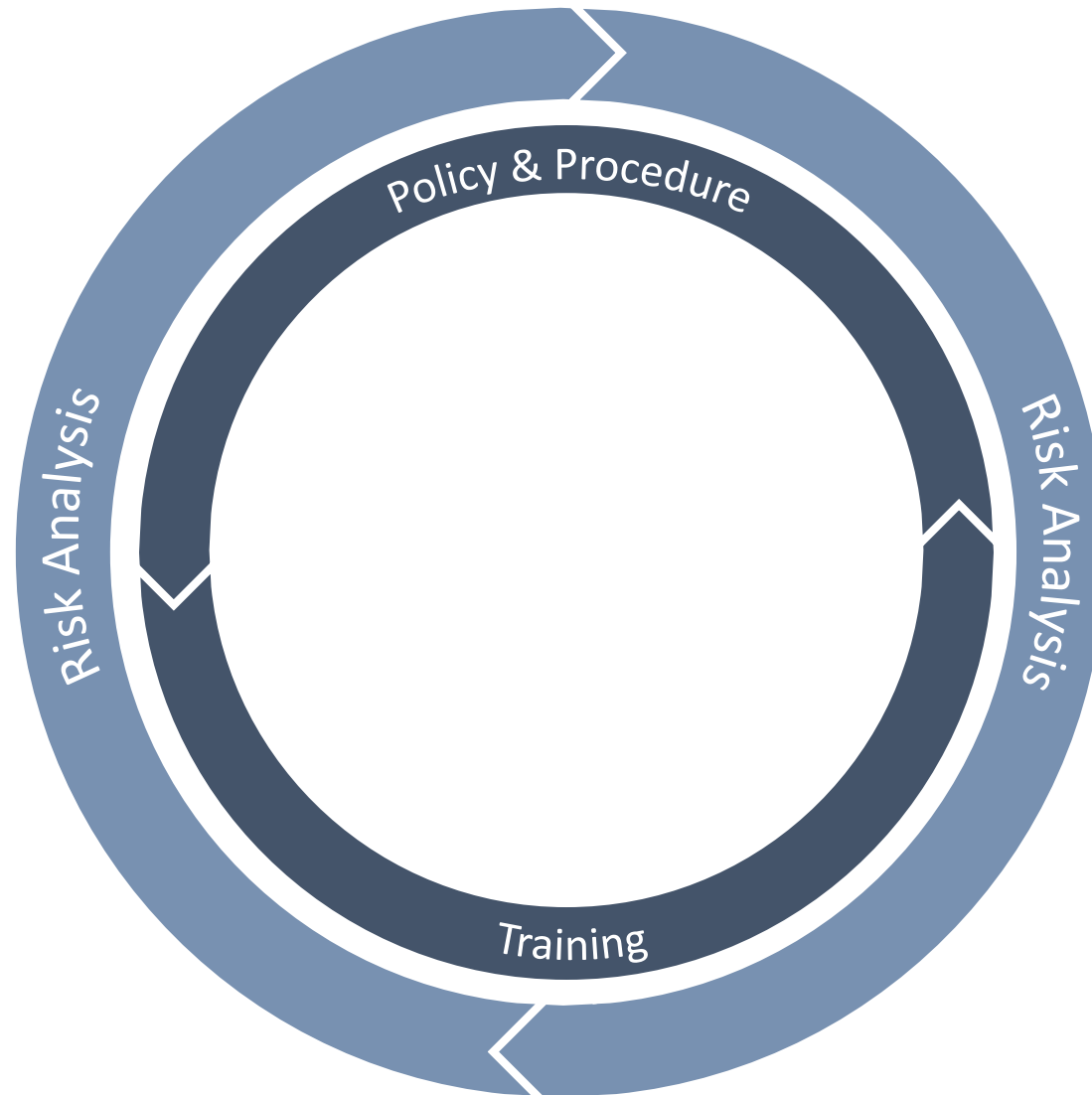


Bringing it All Together



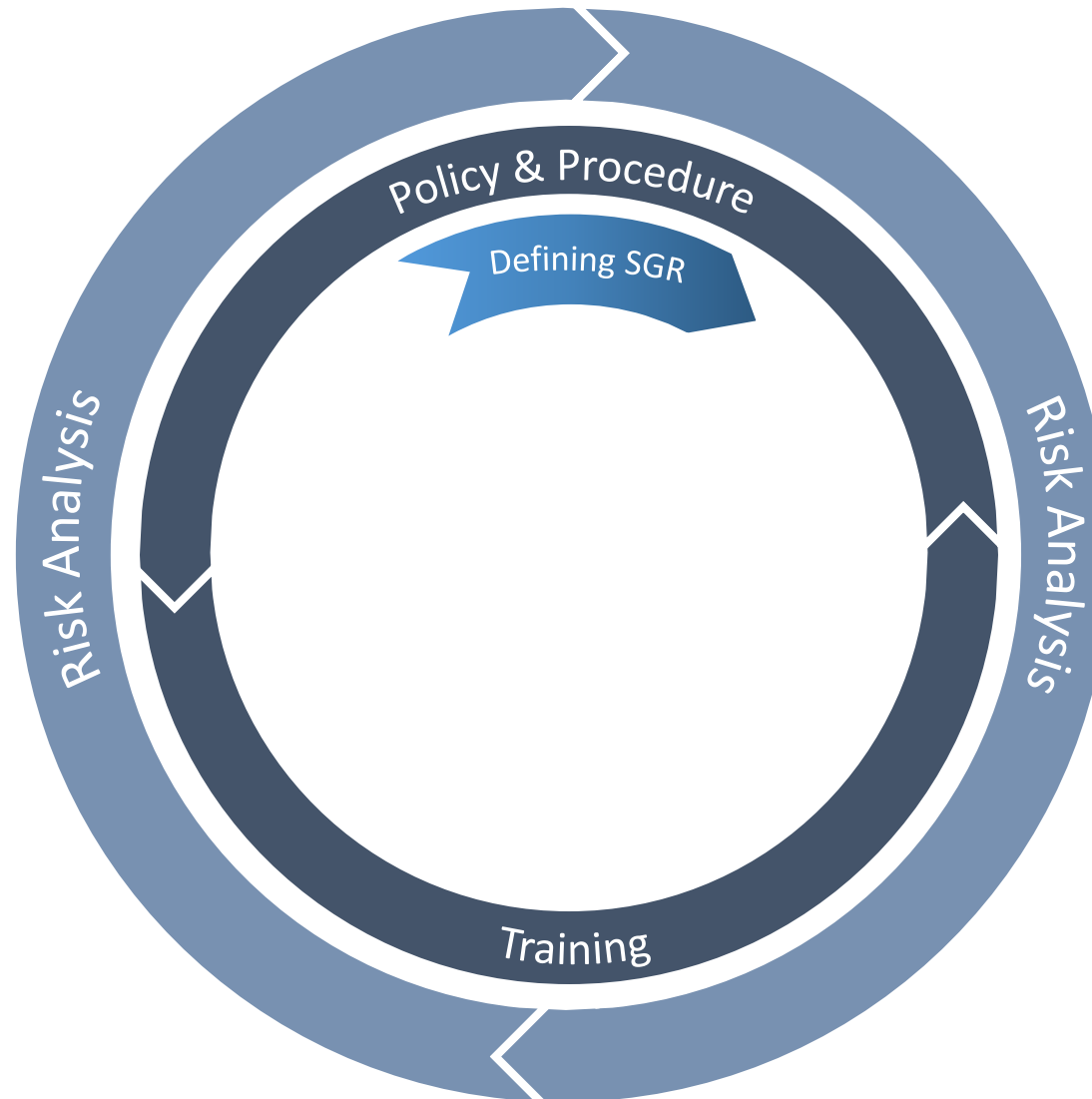


Bringing it All Together



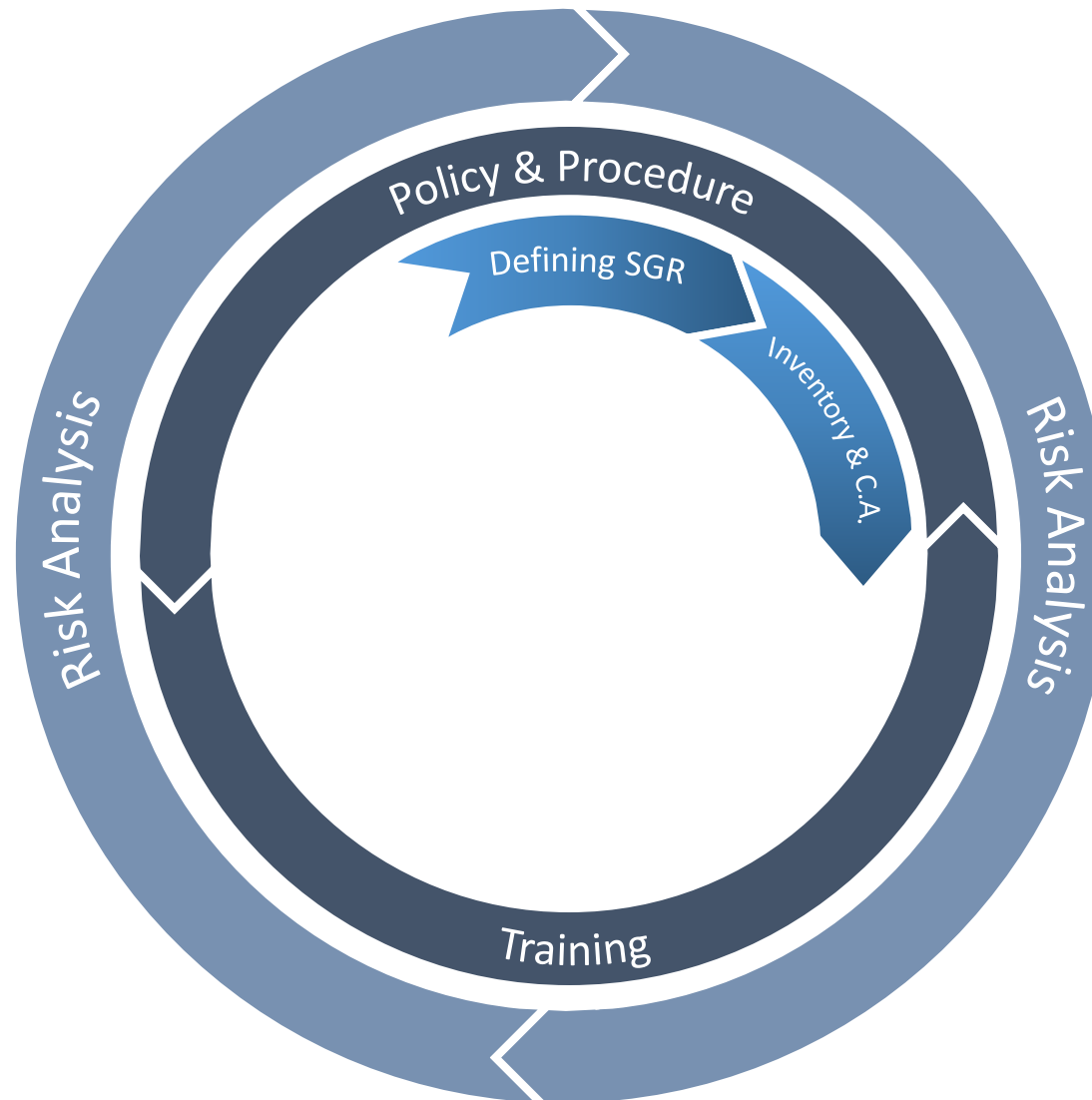


Bringing it All Together



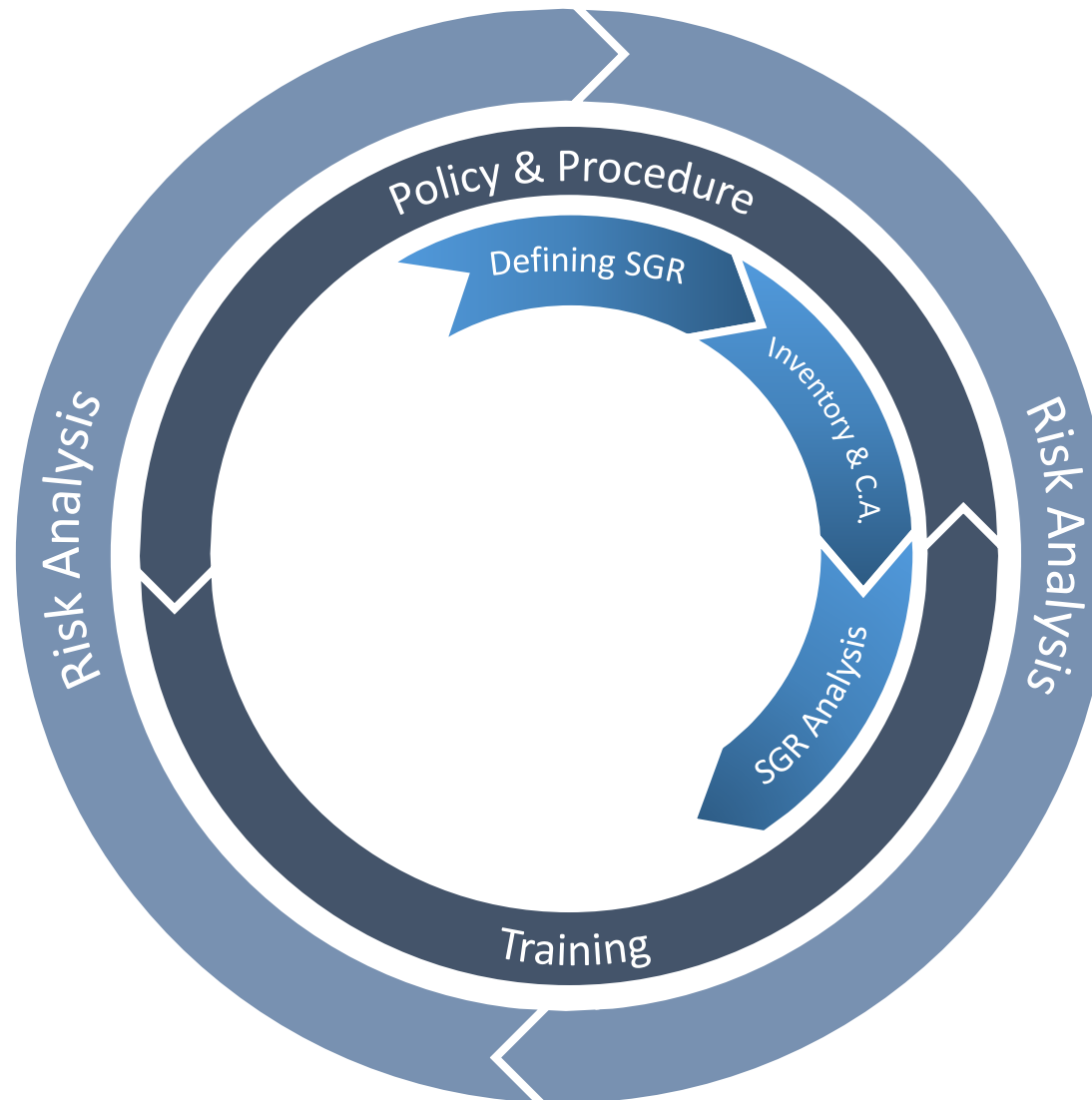


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SGR Analysis

Asset Condition

- Based on determined ULB
- Using TERM scale for 1-5
 - 1 = poor
 - Below 2.5 = not SGR
 - 5 = new

=> TERM calculates condition based on asset age and ULB using "decay curves"

Weight: 60%

Liability Due to Failure

- 1 - <\$100,000
- 2 - >\$100,000
- 3 - >\$1,000,000
- 4 - >\$5,000,000
- 5 - >\$10,000,000

Weight: 20%

Likelihood of Service Loss due to Failure

- 1 - <10%
- 2 - >10%
- 3 - >25%
- 4 - >50%
- 5 - >75%

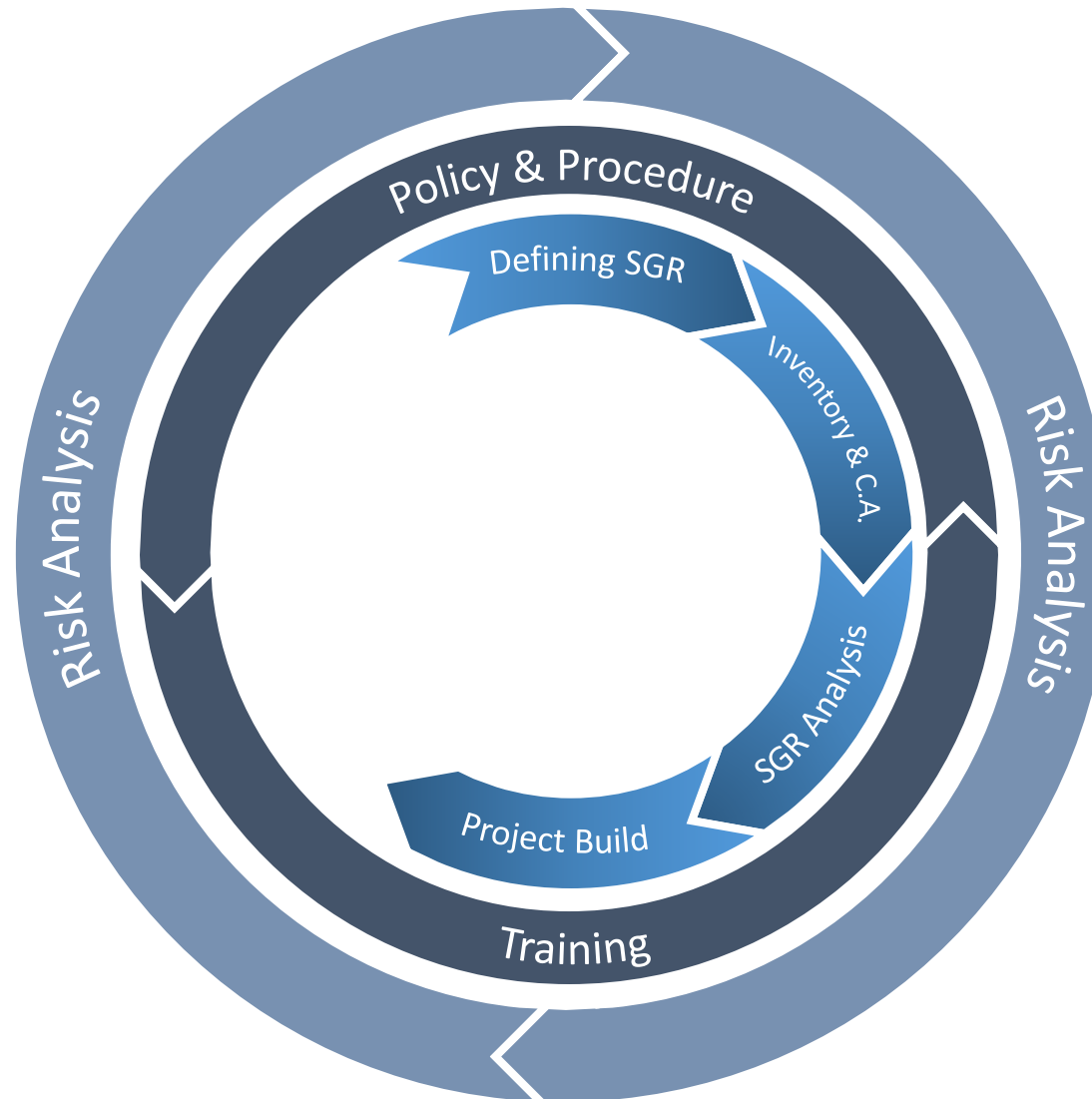
Weight: 20%

"Asset Prioritization Score" For each asset per year, changes per year due to asset condition

Asset Description	SGR Score	Investment Cost
Fleet 50 - Rail Car 1	94.7	\$4,000,000.00
Fleet 50 - Rail Car 2	94.7	\$4,000,000.00
Fleet 50 - Rail Car 3	94.7	\$4,000,000.00
Fleet 50 - Rail Car 4	94.7	\$4,000,000.00
Fleet 50 - Rail Car 5	94.7	\$4,000,000.00
Fleet 50 - Rail Car 6	94.7	\$4,000,000.00
Fleet 50 - Rail Car 7	94.7	\$4,000,000.00
Fleet 50 - Rail Car 8	94.7	\$4,000,000.00
Fleet 50 - Rail Car 9	94.7	\$4,000,000.00
Fleet 50 - Rail Car 10	94.7	\$4,000,000.00
Fleet 50 - Rail Car 11	94.7	\$4,000,000.00
Fleet 50 - Rail Car 12	94.7	\$4,000,000.00
Fleet 50 - Rail Car 13	94.7	\$4,000,000.00
Fleet 50 - Rail Car 14	94.7	\$4,000,000.00
Fleet 50 - Rail Car 15	94.7	\$4,000,000.00
Fleet 50 - Rail Car 16	94.7	\$4,000,000.00
Fleet 50 - Rail Car 17	94.7	\$4,000,000.00
Fleet 50 - Rail Car 18	94.7	\$4,000,000.00
Fleet 50 - Rail Car 19	94.7	\$4,000,000.00
Fleet 50 - Rail Car 20	94.7	\$4,000,000.00
Fixed Route Fleet B - Bus 1	83.6	\$640,000.00
Fixed Route Fleet B - Bus 2	83.6	\$640,000.00
Fixed Route Fleet B - Bus 3	83.6	\$640,000.00
Fixed Route Fleet B - Bus 4	83.6	\$640,000.00
Fixed Route Fleet B - Bus 5	83.6	\$640,000.00
Fixed Route Fleet B - Bus 6	83.6	\$640,000.00
Fixed Route Fleet B - Bus 7	83.6	\$640,000.00
Fixed Route Fleet B - Bus 8	83.6	\$640,000.00
Fixed Route Fleet B - Bus 9	83.6	\$640,000.00
Fixed Route Fleet B - Bus 10	83.6	\$640,000.00
Fixed Route Fleet B - Bus 11	83.6	\$640,000.00
Fixed Route Fleet B - Bus 12	83.6	\$640,000.00
Fixed Route Fleet B - Bus 13	83.6	\$640,000.00
Fixed Route Fleet B - Bus 14	83.6	\$640,000.00
Fixed Route Fleet B - Bus 15	83.6	\$640,000.00
Fixed Route Fleet B - Bus 16	83.6	\$640,000.00
Fixed Route Fleet B - Bus 17	83.6	\$640,000.00
Fixed Route Fleet B - Bus 18	83.6	\$640,000.00
Fixed Route Fleet B - Bus 19	83.6	\$640,000.00
Fixed Route Fleet B - Bus 20	83.6	\$640,000.00



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Project Build

SAMPLE

SAMPLE

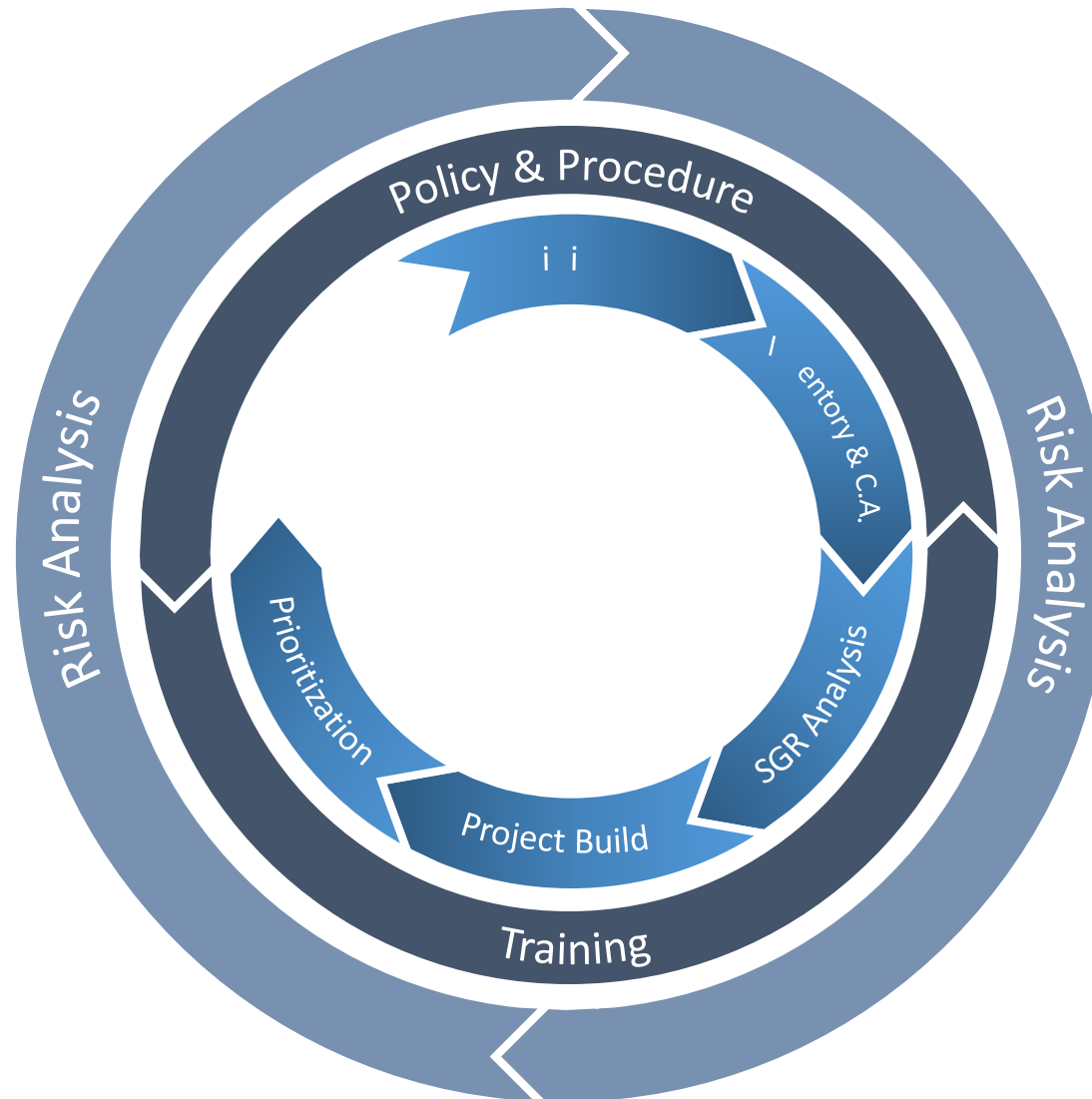
FY20 - Capital Request

Division:
VP Division
Department:
Department Manager:
Cost Center:

Fiscal Year												Regulatory Requirement	Safety & Security	Operational Cost (per year) for new Purchase	Operational Cost (per year) for assets being replaced	Prior Contractual Commitment	Entered by FP&A		Project Score
#	Project Manager	Project Name	Fixed Asset Category (Choose from Drop-down List)	Contract #	FY20	FY21	FY22	FY23	FY24	Total FY18-FY24	Comments/Justification:	Y / N	Rating	\$	\$	Y / N	TAM Scoring #	Agency Goal #	
1	Bill Thomas	Replace Rail Fleet 50	Revenue Vehicles: Rail Cars	n/a	80,000,000	-	-	-	-	\$ 80,000,000	Project Justification	S, F	F	\$ 1,500,000	\$ 1,800,000	N	94.7	2,3,7	1914
2	Jean Roberts	Overhaul Fixed Route Fleet B	Revenue Vehicles: Bus	n/a	4,000,000	4,000,000	4,000,000	-	-	\$ 12,000,000	Project Justification	S, F	C	\$ 740,000	\$ 800,000	N	83.6		1652
3	Jessie Banks	Replace Fixed Route Fleet B	Revenue Vehicles: Bus	n/a	12,800,000	12,800,000	12,800,000	-	-	\$ 38,400,000	Project Justification	S, F	C	\$ 700,000	\$ 800,000	N	83.6		1482
3	Jessie Banks	BRT SW Project -New CNG Buses	Revenue Vehicles: Bus	n/a	9,600,000	-	-	-	-	\$ 9,600,000	Project Justification	C, S	A	\$ 525,000	\$ -	N	0		1052
3	TJ Pardia	BRT SW Project - New Stops & Amenities	Equipment: Amenities	n/a	144,000	-	-	-	-	\$ 144,000	Project Justification	C, S	A	\$ 80,000	\$ -	N	0		1052
TOTALS					\$ 106,544,000	\$ 16,800,000	\$ 16,800,000	\$ -	\$ -	\$ 140,144,000				\$ 3,545,000	\$ 3,400,000				



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Project Prioritization

Capital Budget Available:

\$100,000,000

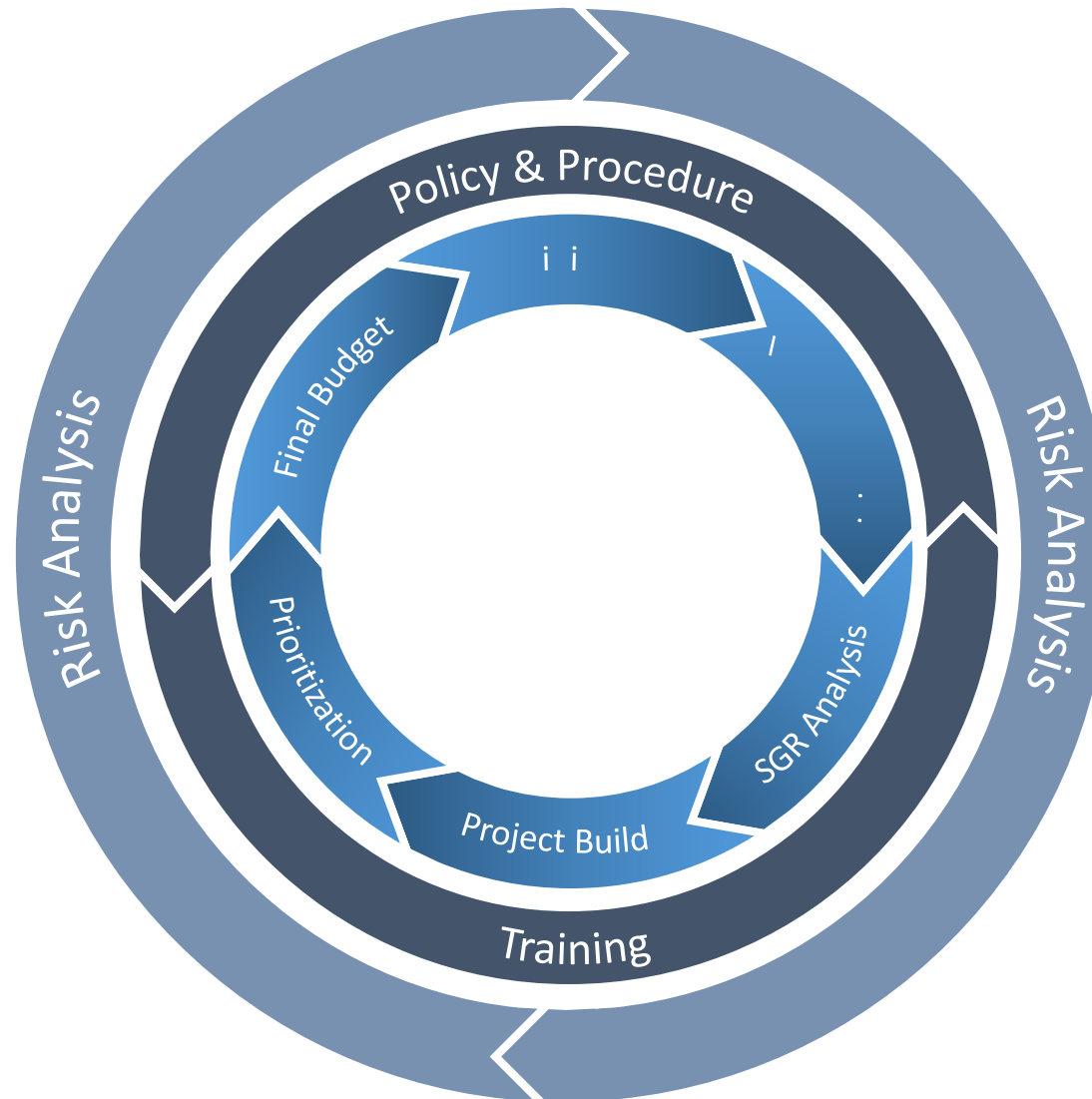
Additional Operating Budget Available:

\$2,000,000

Priority Rank	Project #	Project Description	Project Score (0-2000)	Asset Group	Qty	Useful Life (Yrs)	Capital Cost	Lifecycle Cost	Change in Operational Cost (Per Year)	Additional Revenue Creation (Per Year)
	TAM-1	Replace Rail Fleet 50 with New Vehicles	1914	RF - 50	20	30	80,000,000	360,000,000	(300,000)	0
	TAM-2	Purchase New IT Hyper Convergence Arrays to Replace Current Swerver/Switch for Primary Data Storage Site	1842	IT - S1	4	5	960,000	100,000	8,000	0
	TAM-3	Full Overhaul of Current Fixed Route Fleet B - Diesel Buses	1652	FR - B	20	7	4,000,000	4,900,000	(60,000)	0
	TAM-4	Purchase New CNG Buses to Replace Part of Fixed Route Fleet B	1482	FR - B	20	12	12,800,000	4,800,000	(100,000)	0
	TAM-5	BRT SW Project - Purchase New CNG Buses for Route	1052	BRT - E	15	12	9,600,000	6,300,000	525,000	200,000
	TAM-6	BRT SW Project - New Stops and Associated Amenities for Route	1052	BRT - E	8	10	144,000	800,000	80,000	0
	TAM-7	BRT SW Project - Infrastructure Associated with Routes including Signal Prioritization	1052	BRT - E	1	15	5,000,000	750,000	50,000	0
	TAM-8	Purchase 6 New Autonomous Vehicles for new Route	987	N/A	20	5	7,000,000	5,000,000	1,000,000	150,000
	TAM-9	Purchase New IT Hyper Convergence Arrays to Replace Current Swerver/Switch for Secondary Data Storage Site	762	IT - S2	4	5	960,000	100,000	8,000	0
	TAM-10	City Beautification Project - Replacing Trash Cans Throughout the Constituency	452	CTY	2000	10	1,200,000	20,000,000	1,000,000	0



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Finalizing a Budget

Capital Budget Available:

\$100,000,000

Additional Operating Budget Available:

\$2,000,000

Priority Rank (1Hi - 5Lo)	Project #	Project Description	Project Score (0-2000)	Asset Group	Qty	Useful Life (Yrs)	Capital Cost	Lifecycle Cost	Change in Operational Cost (Per Year)	Additional Revenue Creation (Per Year)
1	TAM-1	Replace Rail Fleet 50 with New Vehicles	1914	RF - 50	20	30	80,000,000	360,000,000	(300,000)	0
2	TAM-3	Full Overhaul of Current Fixed Route Fleet B - Diesel Buses	1652	FR - B	20	7	4,000,000	4,900,000	(60,000)	0
3	TAM-2	Purchase New IT Hyper Convergence Arrays to Replace Current Server/Switch for Primary Data Storage Site	1842	IT - S1	4	5	960,000	100,000	8,000	0
4	TAM-5	BRT SW Project - Purchase New CNG Buses for Route	1052	BRT - E	15	12	9,600,000	6,300,000	525,000	200,000
4	TAM-6	BRT SW Project - New Stops and Associated Amenities for Route	1052	BRT - E	8	10	144,000	800,000	80,000	0
4	TAM-7	BRT SW Project - Infrastructure Associated with Routes including Signal Prioritization	1052	BRT - E	1	15	5,000,000	750,000	50,000	0
							99,704,000		303,000	200,000