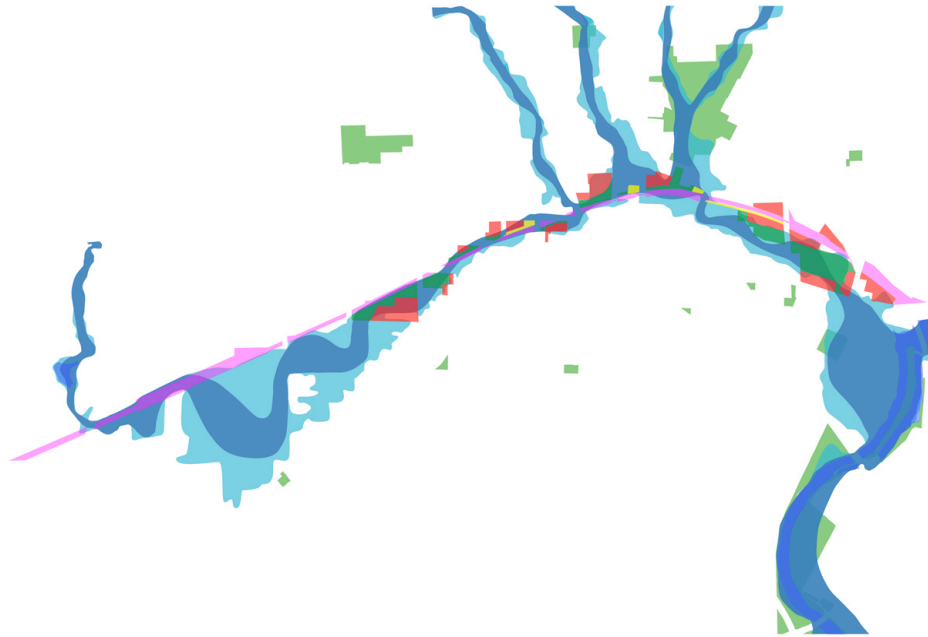


# allen creek greenway

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financial model (selected worksheets)



## **MAP05031 TEAM**

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Stephen M. Ross School of Business at the University of Michigan  
Allen Creek Corridor, MAP 2005, April 26, 2005

## Assumptions Page

### Inflation

Set the rate of increase for park development costs, maintenance costs, etc. (historical inflation in the US is around 3.1%)

### Ann Arbor Property Appreciation

Set the rate at which you want Ann Arbor real estate to appreciate (roughly 5.7% over the past 10 years)

### Taxable Value Appreciation

(set the rate at which you want taxable values to appreciate in Ann Arbor)

### Discount Rate

Set the rate at which you want future costs and cash flows to be discounted in present value analyses.

### Daylighting

(enter 1 to daylight the creek, enter 2 not to daylight)

### Timing

(enter 1 make the greenway materialize over 30 years, 2 for 50 years)

### Exclude the Impacts of Edge Development on Property Tax Revenue?

(enter 1 to consider the impacts, 2 to exclude)

### Include the Proceeds from Sale of Three City Parcels?

(enter 1 to exclude the proceed, 2 to include)

## Indicate Your Choice for the Following Key Properties:

3.1%

**Area 1 - Ann Arbor Auto Property at 907 North Main & 124 W Summit**  
(for owner's 14 story proposal enter 1, for 4-5 story mixed-use enter 2)

2

6.0%

**Area 3 - North Main City Yard**  
(for North Main Commons proposal enter 1, for 100% green space enter 2)

1

4.0%

**Area 7 - 415 West Washington**  
(for 100% green space enter 1, for mixed park/development enter 2)

2

6.0%

**Area 8 - First & William City Parcel**  
(for redevelopment enter 1, for 100% green space enter 2)

2

**Area 9 - Fingerle Lot at the Corner of 1st & William**  
(for partial redevelopment (steering committee) enter 1, for 100% greenspace enter 2)

1

2

**Area 13 - Fingerle Complex**  
(for mixed park/development enter 1, for Hank Byma development enter 2)

1

1

## The Bottom Line

Net Cost/Benefit to the City of the Greenway in 2005 dollars

\$37,172,246

Summary City Sources and Uses of Funds - Allen Creek Greenway														
	2005	2006	2007	2008	2009	2010- 2014	2015- 2019	2020- 2024	2025- 2029	2030- 2034	2035- 2039	2040- 2044	2045- 2049	2050- 2054
<b>Revenue from Sale of City Properties</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Increased Property Tax Revenue</b>														
Increased Tax Revenue from Redevelopment	\$0	\$0	\$320,009	\$332,810	\$1,099,455	\$7,047,029	\$11,564,754	\$17,709,258	\$25,973,379	\$36,987,147	\$45,000,520	\$54,750,013	\$66,611,762	\$81,043,394
Increased Tax Rev. - Existing Structure Appreciation	\$0	\$0	\$0	\$0	\$0	\$65,166	\$79,284	\$96,461	\$117,360	\$142,786	\$173,721	\$211,358	\$257,149	\$312,862
<b>Grants and Subsidies</b>														
EPA Brownfield Money	\$0	\$96,694	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Other Sources</b>														
FEMA			\$797,221											
<b>Total Sources of Funds</b>	\$0	\$96,694	\$1,117,230	\$332,810	\$1,099,455	\$7,112,195	\$11,644,038	\$17,805,719	\$26,090,739	\$37,129,933	\$45,174,241	\$54,961,371	\$66,868,912	\$81,356,256
<b>Land Acquisition Costs</b>														
Land Acquisition Cost	\$0	\$865,526	\$917,457	\$0	\$0	\$2,862,491	\$3,830,659	\$5,126,286	\$6,860,127	\$9,180,398	\$0	\$0	\$0	\$0
<b>Land Remediation</b>														
City Yards Clean-Up	\$0	\$876,350	\$903,517	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Greenway Development Costs</b>	\$0	\$531,481	\$556,005	\$974,428	\$1,359,168	\$1,197,010	\$1,624,368	\$2,204,302	\$2,991,284	\$4,059,237	\$0	\$0	\$0	\$0
<b>Railway Lease</b>	\$0	\$0	\$20,090	\$20,713	\$21,355	\$115,243	\$134,248	\$156,387	\$182,177	\$212,220	\$247,218	\$287,987	\$335,480	\$390,805
<b>Greenway Maintenance Costs</b>	\$0		\$35,670	\$36,776	\$37,916	\$245,536	\$357,535	\$499,797	\$679,256	\$791,274	\$921,765	\$1,073,776	\$1,250,855	\$1,457,137
<b>Creek Daylighting</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Uses of Funds</b>	\$0	\$2,273,356	\$2,432,739	\$1,031,916	\$1,418,438	\$4,420,280	\$5,946,810	\$7,986,772	\$10,712,845	\$14,243,129	\$1,168,983	\$1,361,763	\$1,586,335	\$1,847,942
<b>Total Sources and Uses of Funds</b>	\$0	(\$2,176,663)	(\$1,315,509)	(\$699,107)	(\$318,983)	\$2,691,915	\$5,697,228	\$9,818,948	\$15,377,894	\$22,886,804	\$44,005,258	\$53,599,608	\$65,282,577	\$79,508,314

Greenway Development Worksheet														
Cost Assumptions	Unit	Needed	Total	Cost	Cost Assumptions (Cont.)	Unit	Needed	Total	Cost					
	Cost	per 1/4	2.06	in New		Cost	per 1/4	2.06	in New					
	Cost	Mile	Mile Cost	Parks		Cost	Mile	Mile Cost	Parks					
Asphalt/Fence (8' linear foot)	\$50	NA	\$554,400	NA	Checker Box Porous Paving (sqft)	\$9	NA	NA	\$190,080					
Railway Easment (1/3 Mile)	\$3,000	NA	\$315,000	NA	Climbing Rock	\$30,000	NA	NA	\$150,000					
Way Finding Signs	\$2,000	1	\$16,480	\$6,000	Restroom Facility	\$150,000	NA	NA	\$450,000					
Trash/Recycling Centers	\$500	1	\$4,120	\$8,000	Picnic Pavillion (25 People)	\$75,000	NA	NA	\$225,000					
2.5" Diameter Sugar Maple	\$350	8	\$23,072	\$45,500	Landscaping (non-tree)	\$100,000	acre	NA	\$700,000					
Picnic Table	\$1,500	1	\$12,360	\$13,500	Bike Stand	\$200	2	\$4,000	\$4,000					
Bench with Pad	\$1,200	4	\$39,552	\$12,000	Playground	\$70,000	NA	NA	\$70,000					
Lighting Fixtures Plus Wiring	\$6,850	13.2	\$745,061	\$657,600	Skateboard Park	\$75,000	NA	NA	\$75,000					
Large Walking/Cycling Bridges	\$250,000	NA	\$500,000	NA	Basketball Court	\$30,000	NA	NA	\$60,000					
City Yards Demo	\$1,000,000	NA	\$1,000,000	\$0	Tennis Court	\$50,000	NA	NA	\$100,000					
					<b>Total S-T Cost Estimate</b>			<b>\$3,214,045</b>						
					<b>Total L-T Cost Estimate</b>				<b>\$2,766,680</b>					
Cost Estimates by Year (2005 Dollars)														
Line Item	2005	2006	2007	2008	2009	2010-2014	2015-2019	2020-2024	2025-2029	2030-2034	2035-2039	2040-2044	2045-2049	2050-2054
Asphalt & Fencing				\$184,800	\$369,600									
Way Finding Signs					16,480	1,200	1,200	1,200	1,200	1,200	0	0	0	0
Trash/Recycling Centers					4,120	1,600	1,600	1,600	1,600	1,600	0	0	0	0
2.5" Diameter Sugar Maple			23,072			9,100	9,100	9,100	9,100	9,100	0	0	0	0
Picnic Table					12,360	2,700	2,700	2,700	2,700	2,700	0	0	0	0
Bench with Pad					39,552	2,400	2,400	2,400	2,400	2,400	0	0	0	0
Lighting Fixtures Plus Wiring				372,530	372,530	131,520	131,520	131,520	131,520	131,520	0	0	0	0
Large Walking/Cycling Bridges				250,000	250,000	0	0	0	0	0	0	0	0	0
City Yards Demo		500,000	500,000	4,000		0	0	0	0	0	0	0	0	0
L-T Adj. Park Ammenities						553,336	553,336	553,336	553,336	553,336	0	0	0	0
<b>Total</b>	\$0	\$500,000	\$523,072	\$811,330	\$1,064,642	\$701,856	\$701,856	\$701,856	\$701,856	\$701,856	\$0	\$0	\$0	\$0
Cost Estimates by Year (Inflation Adjusted)														
Line Item	2005	2006	2007	2008	2009	2010-2014	2015-2019	2020-2024	2025-2029	2030-2034	2035-2039	2040-2044	2045-2049	2050-2054
Asphalt & Fencing	\$0	\$0	\$0	\$202,525	\$417,606	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Way Finding Signs	0	0	0	0	18,621	1,463	1,705	1,986	2,313	2,695	0	0	0	0
Trash/Recycling Centers	0	0	0	0	4,655	1,951	2,273	2,648	3,084	3,593	0	0	0	0
2.5" Diameter Sugar Maple	0	0	24,525	0	0	11,097	12,928	15,059	17,543	20,436	0	0	0	0
Picnic Table	0	0	0	0	13,965	3,293	3,836	4,468	5,205	6,063	0	0	0	0
Bench with Pad	0	0	0	0	44,689	2,927	3,409	3,972	4,627	5,390	0	0	0	0
Lighting Fixtures Plus Wiring	0	0	0	408,261	420,917	160,388	186,839	217,651	253,544	295,356	0	0	0	0
Large Walking/Cycling Bridges	0	0	0	273,978	282,472	0	0	0	0	0	0	0	0	0
City Yards Demo	0	515,500	531,481	4,384	0	0	0	0	0	0	0	0	0	0
L-T Adj. Park Ammenities	0	0	0	0	0	728,311	848,419	988,334	1,151,322	1,341,190	0	0	0	0
<b>Total</b>	\$0	\$515,500	\$556,005	\$889,147	\$1,202,925	\$909,431	\$1,059,408	\$1,234,117	\$1,437,639	\$1,674,723	\$0	\$0	\$0	\$0
Railway Easment														
Line Item	2005	2006	2007	2008	2009	2010-2014	2015-2019	2020-2024	2025-2029	2030-2034	2035-2039	2040-2044	2045-2049	2050-2054
Railway Easment (2005 dollars)			\$18,900	\$18,900	\$18,900	\$94,500	\$94,500	\$94,500	\$94,500	\$94,500	\$94,500	\$94,500	\$94,500	\$94,500
Railway Easment (Adj. Inflation)	\$0	\$0	\$20,090	\$20,713	\$21,355	\$115,243	\$134,248	\$156,387	\$182,177	\$212,220	\$247,218	\$287,987	\$335,480	\$390,805