Bike to the Future

2009 Capital Budget Submission

Presented December 2, 2008

- Bike to the Future is a voluntary, inclusive group of concerned citizens working to make cycling in Winnipeg a safe, enjoyable, accessible and convenient transportation choice year-round.

- We envision a city where cycling is embraced as the preferred mode of transportation, where cycling is integrated into urban design and planning, and where Winnipeg is recognized as a leader in cycling infrastructure and programs .

Progress over the Past Year

- 2008 Active Transportation Action Plan
  - $2.58 million for pathways
  - $600,000 for AT Corridors
    - Bike Boulevards
    - Bike Lanes
  - First Iteration of Active Transportation Network Map
- Disraeli Bicycle/Pedestrian Bridge
- Policy Changes
  - Incorporation of Active Transportation facilities into any reconstruction or rehabilitation required on infrastructure identified as an Active Transportation facility

Increasing Bicycle Traffic

- Bicycle Counts
  - 25% Increase in Bicycle Traffic Between 2007 and 2008
- Bike to Work Day
  - 2,440 cyclists registered as participants
  - 432 of those participants were first time commuters
  - 64% Increase from 2008 Bicycle Traffic Counts

AT Corridors

- Use Sharrows Only as a Stop Gap Measure
  - Not as a substitute for bike lanes on longer routes
- In shared lanes, restrict their use to 4.3m wide lanes
- For short distances, allow Sharrows in the center of the lanes to indicate that cyclists should take the full lane
  - sign appropriately
- Funding should be for bike boulevards, bike lanes, and grade separations

Sturgeon Creek Bridge

- Make sure Pedestrian Underpass Accommodates Cyclists
- Include Curb Cuts for Flood Season

Osborne Bridge

- Bicycles account for 4% of traffic
- Pedestrians account for 8% of traffic
- Complaints of Bicycle/Pedestrian Conflicts
- Make sure that Rehabilitation includes widening to accommodate bike lanes

Jubilee Overpass/Pembina Underpass

- Plan for Connection to Harrow Bikeway
  - Sherbrook/Maryland Bridges
    - University of Winnipeg
    - Health Sciences Complex
  - Earl Grey/Corydon Village
  - River Heights

Southwest Rapid Transit Corridor

- Include Cyclists in all Grade Separations
- Include Active Transportation Advisory Committee in Design Process

Potential for Increased Cycling Rates in Winnipeg

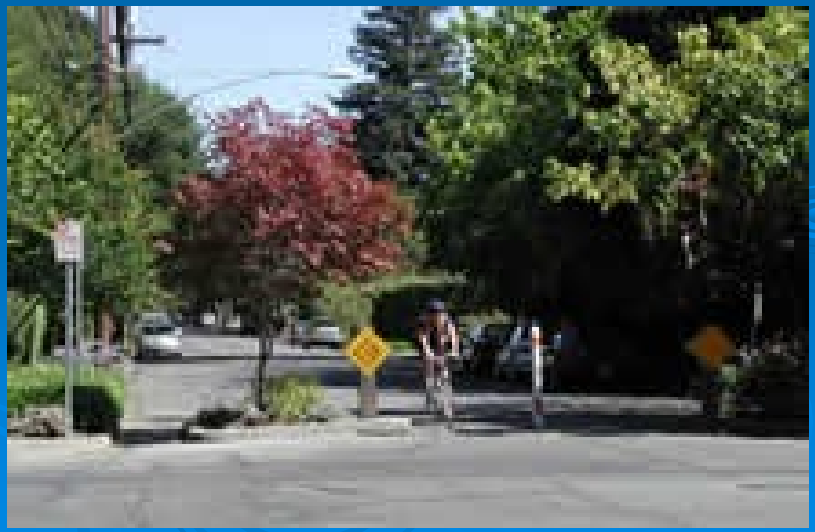
- 30% of Manitobans cycle “most of the time” to at least one destination
- 30% of Manitobans cycle “sometimes” as a mode of transportation
- 65% of Manitobans would like to use bicycles more as a mode of transportation
  - Source City of Winnipeg Active Transportation Study, 2004
- 90% of Manitobans support governments investing more money in active transportation
  - Source: Manitoba Medical Association 2007

What Cyclists Want

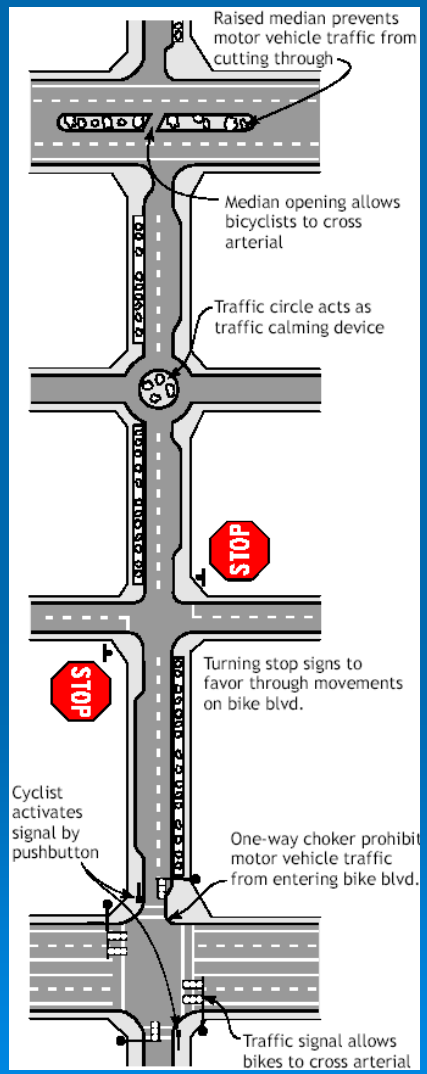
- Safe Routes
- Convenient and Direct Routes that connect destinations
  - Employment Centres
  - Education Centres
  - Shopping Districts
  - Entertainment Districts
  - Recreation
  - Residences
- Secure Bicycle Parking (Short Term and Long Term)

Bicycle Boulevards

- Low-traffic neighbourhood streets that have been optimized for bicycling
- Welcoming to kids, families and novice cyclists, and attractive for all kinds of cyclists
- They provide direct, attractive routes for bikes
- They enhance neighbourhood liveability and traffic safety



Implementing Bike Boulevards



- Traffic calming to slow cars down
- Diverters to discourage through traffic (Bicycles travel through)
- Turned Stop Signs to Minimize stops for Bicycles
- Traffic lights and curb extensions to help cyclists cross busy streets
- Central to the Cycling Networks in Vancouver, Montreal and Portland

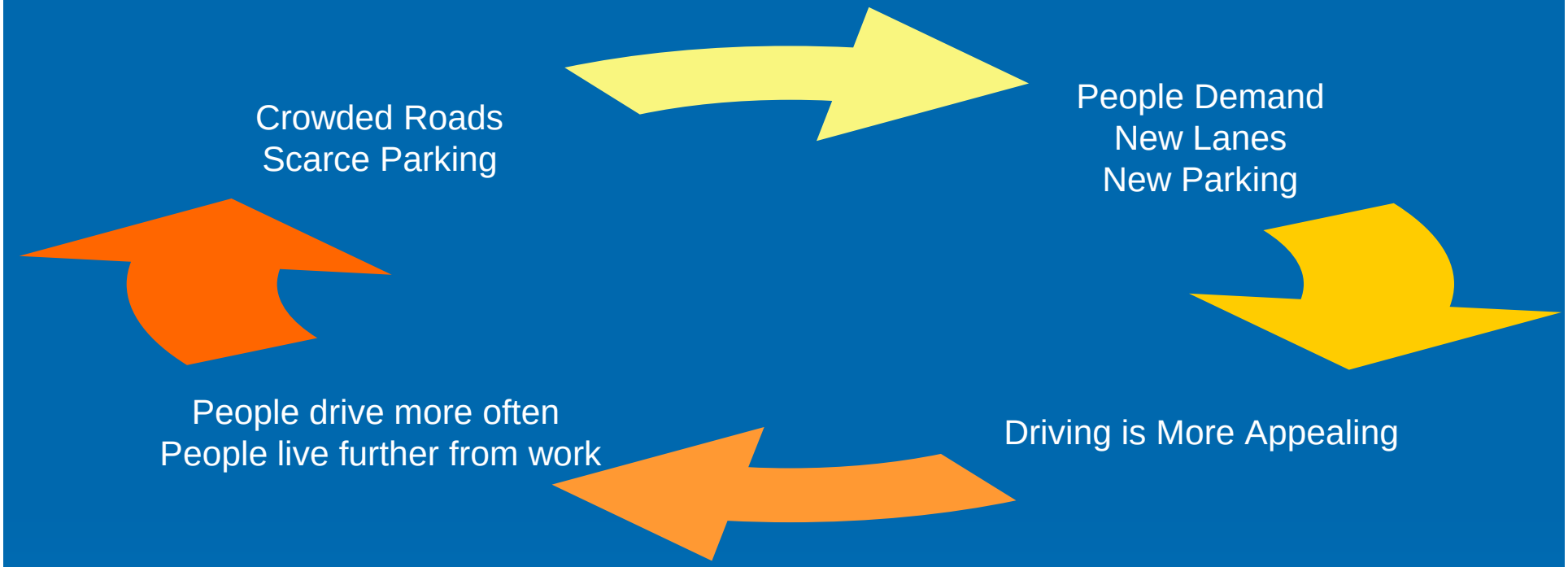
Bike Lanes

- Following installation of a bike lane on Fell Street in San Francisco, the number of cyclists rose 32%, and percentage of cyclists riding on the sidewalk dropped from 50% to 10%
- In Toronto, the average increase in cycling two years after installation of a bike lane was found to be 23%

Sources: FELL STREET BIKE LANE (SCOTT TO BAKER) AND TOW-AWAY ZONE PROPOSAL (City of San Francisco, 2004)
Shifting Gears: City of Toronto Bike Plan (June 2001); City of Toronto

Grade Separations

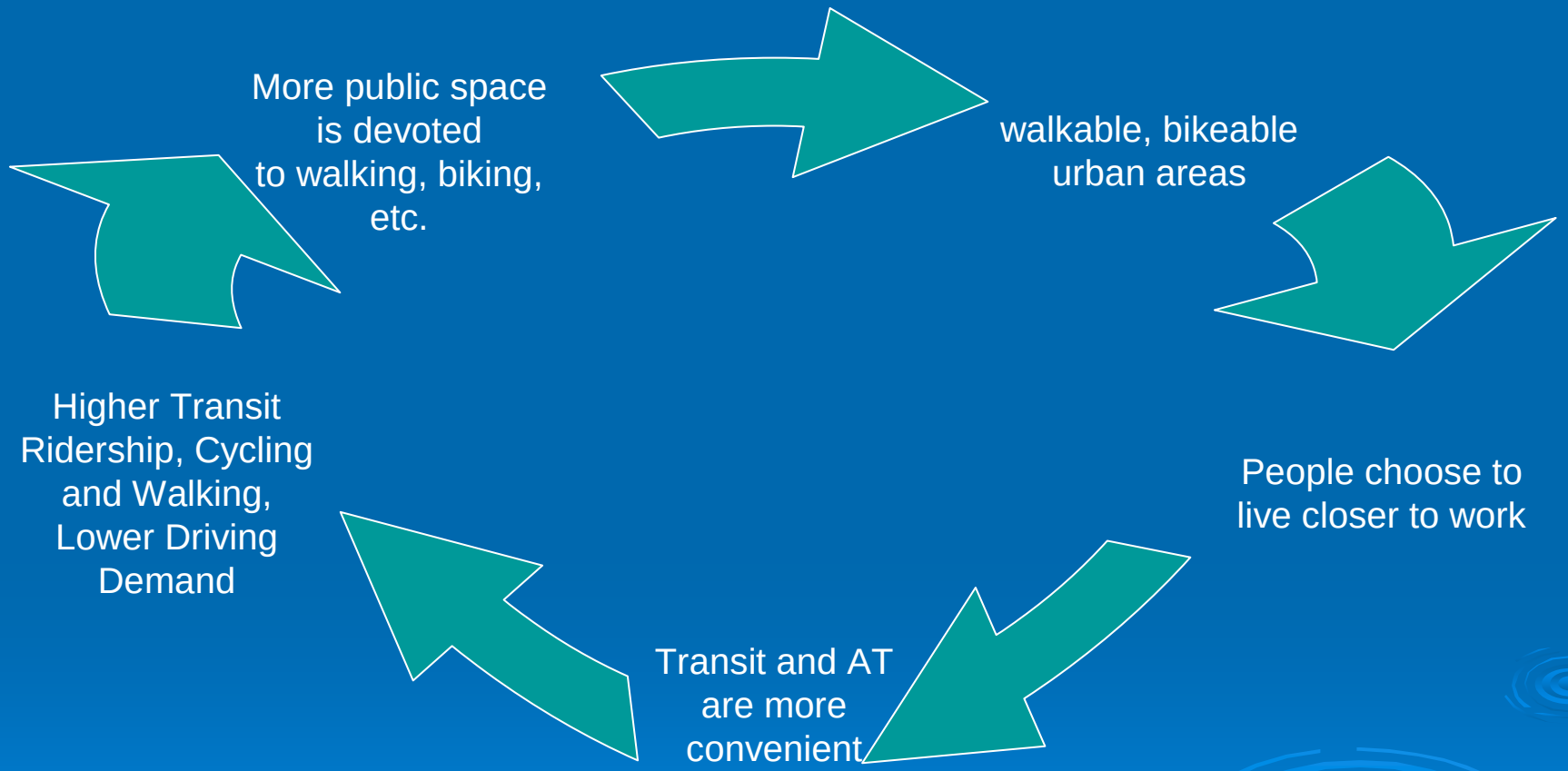
More Roads Create More Traffic



- For every 1% increase in roadway capacity, traffic increases by 0.9% within 4 years

Sources: Graphic - David Alpert, Greater Greater Washington
Statistic - Building Communities With Transportation, Dan Burden 2001

Rethink Transportation Priorities



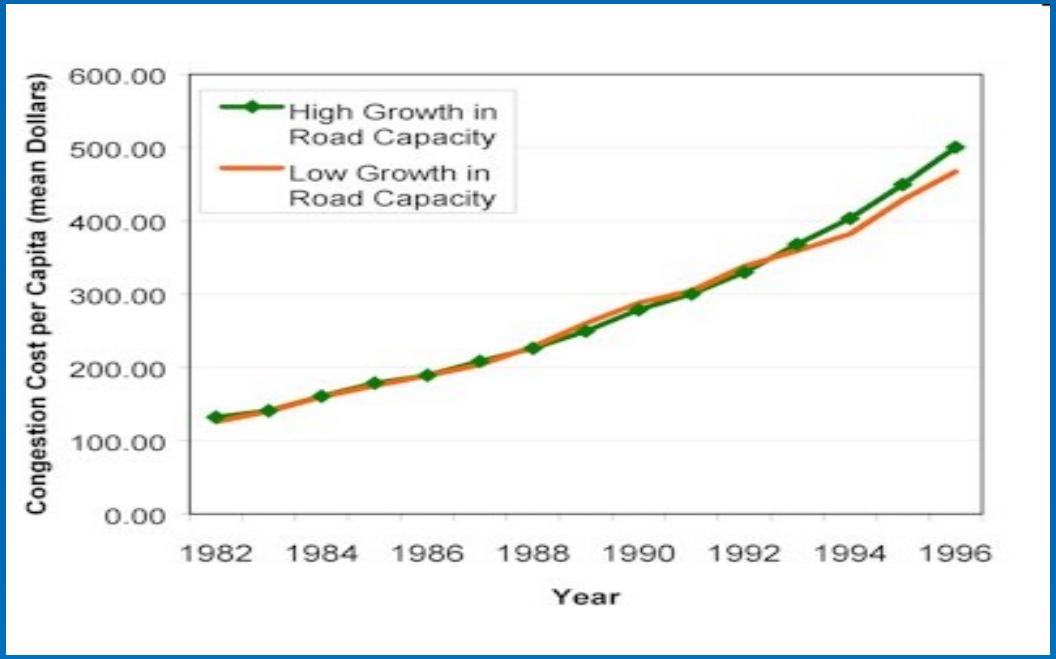
More than 60 percent of metro Portland's residents rated their transportation system good or excellent, compared to only 35 percent of Americans

Source: Graphic - David Alpert, Greater Greater Washington; Statistics - Portland's Green Dividend (Joe Cortright , 2007)

You can't Build your way out of Congestion

Texas Transportation Institute's report on congestion in major metropolitan areas

- 15 years of data on road capacity and traffic congestion
- Covers 70 Metropolitan Areas



There was no significant difference in congestion cost per capita between metro areas that invested heavily in roadway expansion and those that did not expand heavily

Source: An Analysis of the Relationship Between Highway Expansion and Congestion in Metropolitan Areas; *November 1998*, Surface Transportation Policy Project

Making a Commitment to Cycling

- $80 Million Over 10 years
  - $2 Million/Year Recreational Pathways
  - $6 Million/Year AT Corridors
    - $2 Million/Year Bikeways
    - $4 Million/Year Grade Separations

Increased Capacity

- 50 km of new bike paths
- 100 to 150km of new bikeways
- 3-6 Bike/Pedestrian Grade Separations
- Increase Bicycle Modal Share From 3% to 7.5%
- 60 Kt Annual Reduction in GHGs
- $18.5 Million Annual Savings in Fuel

Funding

- Costs Amortized over 25 Years
- 50/50 Cost Share with Province
  - Amounts to less than 1% of Highways Funding
- Cash to Capital $2.044 Million/Year
  - That's just $3.23 per capita
  - Requires $1.544 Million/Year Increase from Budget
  - $259K/Year increase from 2008 funding
- Additional Funding from Reductions/Delays in Planned Roadway Expansion

Bike to the Future
2009 Capital Budget Presentation Appendices

Commuter Growth in Winnipeg

Year	Commuters	Car Commuters	Expected Growth	Bike Commuters	Bike Growth	Mitigated Growth	Car Modal Share	Bike Modal Share
0	313325	244707	3059	8773	1053	2006	78.10%	2.80%
1	317242	246713	3084	9826	1179	1905	77.77%	3.10%
2	321207	248618	3108	11005	1321	1787	77.40%	3.43%
3	325222	250405	3130	12326	1479	1651	77.00%	3.79%
4	329287	252056	3151	13805	1657	1494	76.55%	4.19%
5	333404	253550	3169	15461	1855	1314	76.05%	4.64%
6	337571	254864	3186	17317	2078	1108	75.50%	5.13%
7	341791	255972	3200	19395	2327	872	74.89%	5.67%
8	346063	256844	3211	21722	2607	604	74.22%	6.28%
9	350389	257448	3218	24328	2919	299	73.47%	6.94%
10	354769	257747	3222	27248	3270	-48	72.65%	7.68%
11	359203	257699	3221	30518	3662	-441	71.74%	8.50%
12	363693	257258	3216	34180	4102	-886	70.73%	9.40%
13	368240	256372	3205	38281	4594	-1389	69.62%	10.40%
14	372843	254983	3187	42875	5145	-1958	68.39%	11.50%
15	377503	253025	3163	48020	5762	-2600	67.03%	12.72%
16	382222	250426	3130	53783	6454	-3324	65.52%	14.07%
17	387000	247102	3089	60236	7228	-4140	63.85%	15.56%
18	391837	242962	3037	67465	8096	-5059	62.01%	17.22%
19	396735	237904	2974	75561	9067	-6093	59.97%	19.05%
20	401694	231810	2898	84628	10155	-7258	57.71%	21.07%

Growth in Commuter Modal Share
Annual Growth in Commuters - 1.25%
Annual Growth in Bike Commuters - 12%

Effect of Sustained bike growth on Need to Twin Roadways

Year	Peak Hour Traffic	Expected Growth	Bikes	Expected Growth	Mitigated Growth	Business as Usual	Annual Growth
0	500	10	14	1.68	8	500	10
1	508	10	16	1.88	8	510	10
2	517	10	18	2.11	8	520	10
3	525	10	20	2.36	8	531	11
4	533	11	22	2.64	8	541	11
5	541	11	25	2.96	8	552	11
6	549	11	28	3.32	8	563	11
7	557	11	31	3.71	7	574	11
8	564	11	35	4.16	7	586	12
9	571	11	39	4.66	7	598	12
10	578	12	43	5.22	6	609	12
11	584	12	49	5.84	6	622	12
12	590	12	55	6.55	5	634	13
13	595	12	61	7.33	5	647	13
14	600	12	68	8.21	4	660	13
15	604	12	77	9.20	3	673	13
16	606	12	86	10.30	2	686	14
17	608	12	96	11.53	1	700	14
18	609	12	108	12.92	-1	714	14
19	608	12	121	14.47	-2	728	15
20	606	12	135	16.21	-4	743	15

Peak Hour Traffic Growing at 2%
Bike Traffic Growing at 12%

25 Year Funding Amortization Tables

Year	City Bike Paths	City AT Corridors	City Total	Provincial Bike Paths	Provincial AT Corridors	Provincial Total	Total	Cash to Capital	Diverted Twinnings	Financial Cost Savings	Deficit	Finance Charge	Accumulated Debt
2009	$1,000	$3,000	$4,000	$1,000	$3,000	$4,000	$8,000	$2,044	0	$0	$1,956		$1,956
2010	$1,120	$3,360	$4,480	$1,120	$3,360	$4,480	$8,960	$2,085	0	$0	$2,395	$117	$4,468
2011	$1,254	$3,763	$5,018	$1,254	$3,763	$5,018	$10,035	$2,127	0	$0	$2,891	$268	$7,628
2012	$1,405	$4,215	$5,620	$1,405	$4,215	$5,620	$11,239	$2,169	0	$0	$3,451	$458	$11,536
2013	$1,574	$4,721	$6,294	$1,574	$4,721	$6,294	$12,588	$2,212	1	-$665	$3,417	$692	$15,645
2014	$1,762	$5,287	$7,049	$1,762	$5,287	$7,049	$14,099	$2,257	1	-$665	$4,128	$939	$19,773
2015	$1,974	$5,921	$7,895	$1,974	$5,921	$7,895	$15,791	$2,302	1	-$665	$4,929	$1,186	$24,702
2016	$2,211	$6,632	$8,843	$2,211	$6,632	$8,843	$17,685	$2,348	1	-$665	$5,830	$1,482	$32,014
2017	$2,476	$7,428	$9,904	$2,476	$7,428	$9,904	$19,808	$2,395	2	-$1,329	$6,180	$1,921	$40,115
2018	$2,773	$8,319	$11,092	$2,773	$8,319	$11,092	$22,185	$2,443	2	-$1,329	$7,320	$2,407	$49,842
	$17,549	$52,646	$70,195	$17,549	$52,646	$70,195	$140,390				$42,497		
2019								$2,492	2	-$1,329		$2,991	$49,012
2020								$2,541	2	-$1,329		$2,941	$48,082
2021								$2,592	3	-$1,994		$2,885	$46,380
2022								$2,644	3	-$1,994		$2,783	$44,525
2023								$2,697	3	-$1,994		$2,672	$42,506
2024								$2,751	3	-$1,994		$2,550	$40,311
2025								$2,806	4	-$2,658		$2,419	$37,266
2026								$2,862	4	-$2,658		$2,236	$33,981
2027								$2,919	4	-$2,658		$2,039	$30,442
2028								$2,978	4	-$2,658		$1,827	$26,632
2029								$3,037	4	-$2,658		$1,598	$22,535
2030								$3,098	5	-$3,323		$1,352	$17,466
2031								$3,160	5	-$3,323		$1,048	$12,030
2032								$3,223	5	-$3,323		$722	$6,206
2033								$3,288	5	-$3,323		$372	-$32

Annual Growth in Construction Costs – 12%
Annual Growth in Cash to Capital – 2%
Interest Rate - 6%
Cost of Deferred Project - $10,000
Amortization of Deferred Projects – 40 years