#### Nixa Addendum:

Regional Bicycle and Pedestrian Trail Investment Study

- Background
- ▶ Unique Features
- New Alignments
- Costs

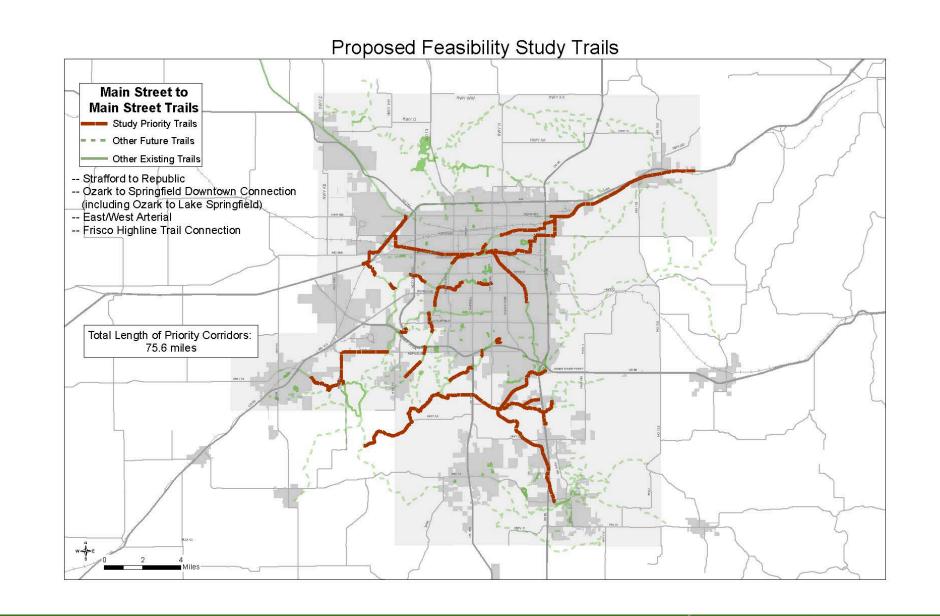


Ozarks Transportation Organization
Bicycle & Pedestrian Trail Investment Study



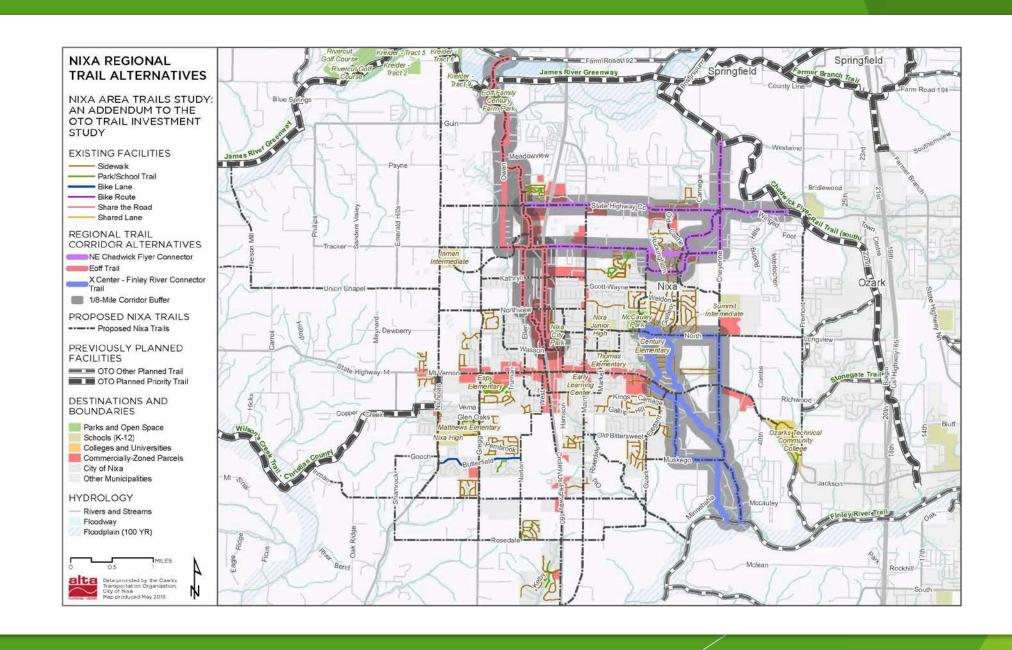
October, 2017

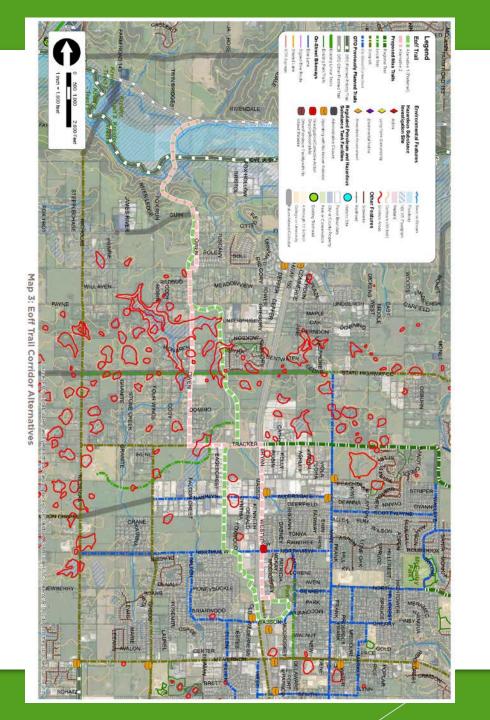


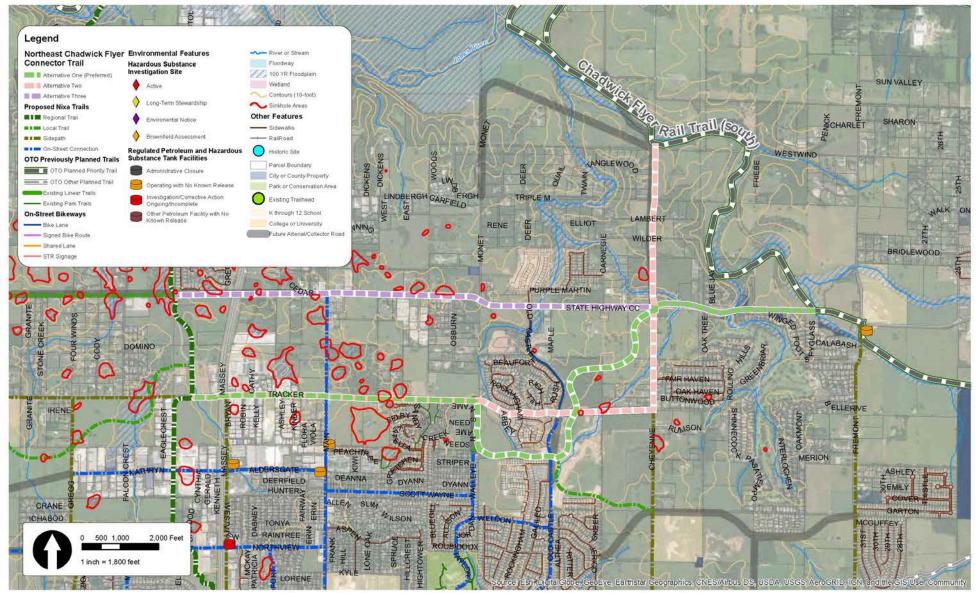


### Nixa Addendum

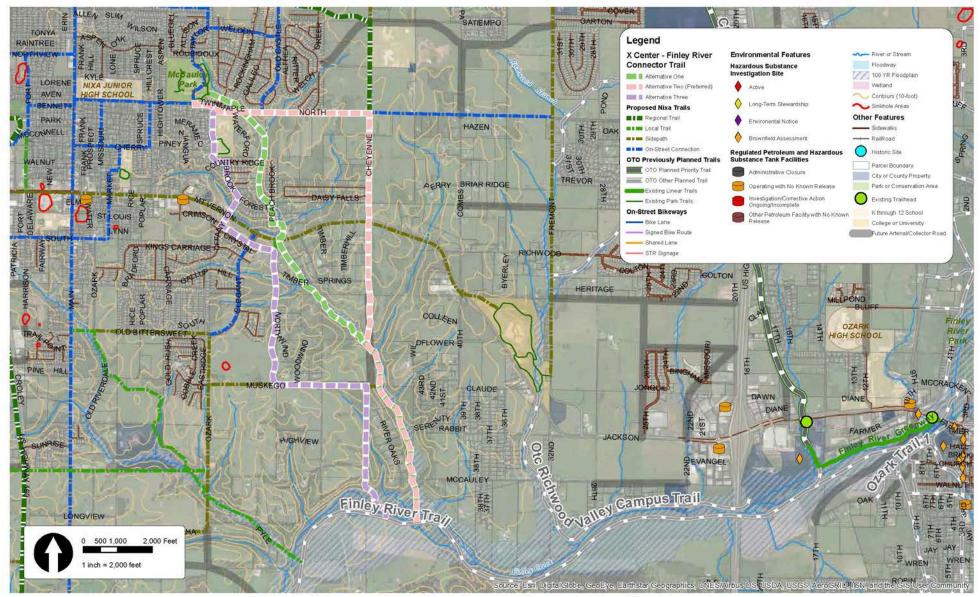
- Donated Park Land
- Proposing Not Refining
  - ▶ 2-3 Connections
- Received Additional Information
  - Sidewalks
  - Sidepaths
  - ► Local Trails
- Costs
- Less Environmental



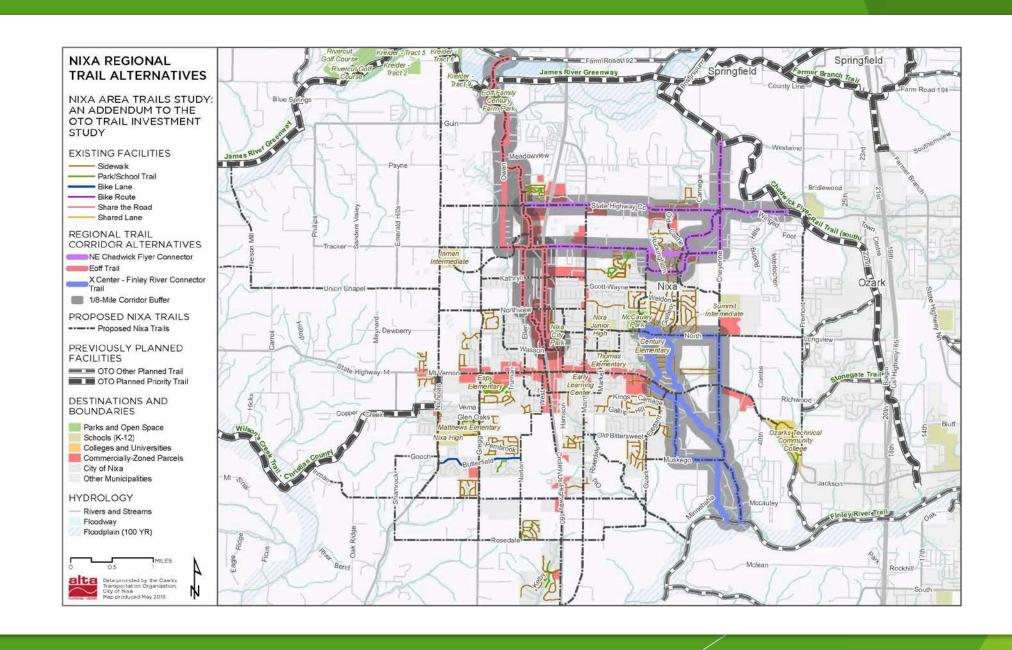




Map 4: Northeast Chadwick Flyer Connector Corridor Alternatives



Map 5: X Center - Finley River Greenway Connector Corridor Alternatives



## Planning Level Costs

Recommended Facility	Limit From	Limit To	Project Length (Miles)	Planning Level Cost Estimate	
Regional Trails					
Eoff Trail	Northview Drive	Future Rivercut Parkway	4.77	\$6,195,843	
Finley River Connector Trail	Finley Creek Greenway	McCauley Park	3.32	\$4,317,338	
NE Chadwick Flyer Connector	Eoff Trail	Chadwick Flyer Trail at Hwy CC	3.94	\$5,117,925	

### **Detailed Costs**

Table 9: Eoff Trail Opinion of Probable Cost, 10ft Paved Path with 12ft Bridges

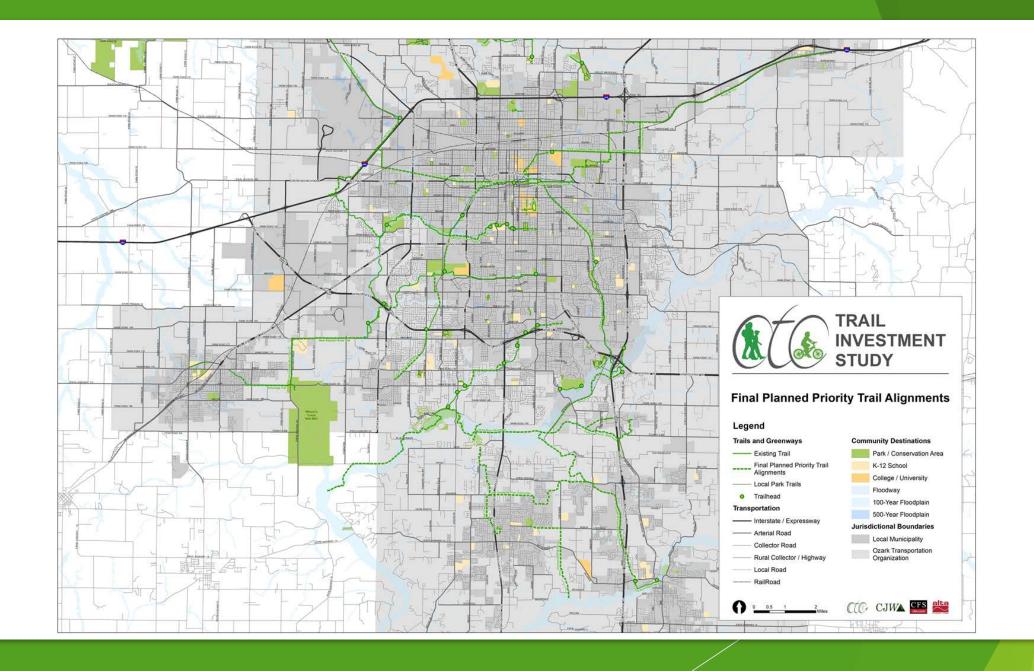
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Clearing & Grubbing	3	AC	\$7,500.00	\$22,500.00
Linear Grading Class 1	252	STA	\$3,000.00	\$756,000.00
Compacting Subgrade	28,989	SY	\$2.00	\$57,978.00
4" Aggregate Base	28,989	SY	\$9.00	\$260,901.00
6" Concrete Pavement	27,989	SY	\$85.00	\$2,379,065.00
7" Non-reinforced Concrete (Road Base Pvmt)	225	SY	\$85.00	\$19,125.00
Bituminous Pavement Mix PG64-22 BP-1 (2")	25	TON	\$95.00	\$2,375.00
Tack Coat (0.10 GAL/SY)	225	GAL	\$5.00	\$1,125.00
Driveway Repairs & Reconstruction	325	SY	\$90.00	\$29,250.00
Curb Ramps	450	SY	\$135.00	\$60,750.00
Truncated Domes	360	SF	\$30.00	\$10,800.00
Concrete Curb	360	LF	\$35.00	\$12,600.00
Wayfinding Signage (1 per 0.25 MI of Trail)	20	EA.	\$1,000.00	\$20,000.00
Rock Lining (100 CY per bridge abutment)	200	CY	\$85.00	\$17,000.00
24" White Stop Bars	84	LE	\$15.00	\$1,260.00
24" White Yield Markings	36	EA	\$50.00	\$1,800.00
30" White High Visibility Markings	540	LF	\$20.00	\$10,800.00
Trail Signage & Posts (2 signs per 500')	101	EA	\$350.00	\$35,350.00
Roadway Signage & Posts (4 signs per Crossing)	36	EA	\$350.00	\$12,600.00
RRFB	6.	EA	\$10,000.00	\$60,000.00
Signal Modification (Pedestrian-Cyclist Upgrades)	1	EA	\$50,000.00	\$50,000.00
Seed, mulch, etc	10	ACRE	\$5,000.00	\$50,000.00
Temporary Silt Fence	25,190	LF	\$3.00	\$75,570.00
Ditch Checks	252	EA.	\$225.00	\$56,677.50
Sediment Removal	504	CY	\$40.00	\$20,152.00
Pedestrian Bridge (12' wide)	1,860	SF	\$300.00	\$558,000.00
Decorative Pedestrian Guardrail	100	LF	\$120.00	\$12,000.00
Contractor Construction Staking (1%)	1	LSUM	\$45,936.79	\$45,936.79
Site Furnishings (1.5%)	1"	LSUM	\$68,905.18	\$68,905.18
Removal of Improvements (3%)	1	LSUM	\$137,810.36	\$137,810.36
Temporary Traffic Control (3%)	1	LSUM	\$137,810.36	\$137,810.36
Drainage Improvements (5%)	1	LSUM	\$229,683.93	\$229,683.93
Landscaping (5%)	1	LSUM	\$229,683.93	\$229,683.93
Utility Relocations (5%)	T	LSUM	\$229,683.93	\$229,683.93
Mobilization (10%)	T	LSUM	\$459,367.85	\$459,367.85
Subtotal	П			\$6,132,561
Contingency 25%	П			\$1,533,140
Total	П			\$7,665,701
Engineering & Surveying Costs 15%	П			\$1,149,855
Construction Administration & Inspection Costs 10%	П			\$766,570
Easement & Right-of-Way Costs 5%	П			\$383,285
Grand Total	-			\$9,965,411

Table 10: Northeast Chadwick Flyer Connector Trail Opinion of Probable Cost, 10ft Paved Path with 12ft Bridges

ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Clearing & Grubbing	2	AC	\$7,500.00	\$15,000.00
Linear Grading Class 1	208	STA	\$3,000.00	\$624,000.00
Compacting Subgrade	24,744	SY	\$2.00	\$49,488.00
4" Aggregate Base	24,744	SY	\$9.00	\$222,696.00
6" Concrete Pavement	23,089	SY	\$85.00	\$1,962,565.00
7" Non-reinforced Concrete (Road Base Pvmt)	400	SY	\$85.00	\$34,000.00
Bituminous Pavement Mix PG64-22 BP-1 (2")	44	TON	\$95.00	\$4,222.22
Tack Coat (0.10 GAL/SY)	400	GAL	\$5.00	\$2,000.00
Driveway Repairs & Reconstruction	455	SY	\$90.00	\$40,950.00
Curb Ramps	800	SY	\$135.00	\$108,000.00
Truncated Domes	640	SF	\$30.00	\$19,200.00
Concrete Curb	640	LF	\$35.00	\$22,400.00
Wayfinding Signage (1 per 0.25 MI of Trail)	16	EA	\$1,000.00	\$16,000.00
Rock Lining (100 CY per bridge abutment)	0	CY	\$85.00	\$0.00
24" White Stop Bars	210	LF	\$15.00	\$3,150.00
24" White Yield Markings	12	EA	\$50.00	\$600.00
30" White High Visibility Markings	960	LF	\$20.00	\$19,200.00
Trail Signage & Posts (2 signs per 500')	84	EA	\$350.00	\$29,400.00
Roadway Signage & Posts (4 signs per Crossing)	64	EA	\$350.00	\$22,400.00
RRFB	2	EA	\$10,000.00	\$20,000.00
Signal Modification (Pedestrian-Cyclist Upgrades)	3	EΑ	\$50,000.00	\$150,000.00
Seed, mulch, etc	8	ACRE	\$5,000.00	\$40,000.00
Temporary Silt Fence	20,780	LF	\$3.00	\$62,340.00
Ditch Checks	208	EA	\$225.00	\$46,755.00
Sediment Removal	416	CY	\$40.00	\$16,624.00
Pedestrian Bridge (12' wide)	0	SF	\$300.00	\$0.00
Decorative Pedestrian Guardrail	0	LF	\$120.00	\$0.00
Contractor Construction Staking (1%)	1	LSUM	\$35,309.90	\$35,309.90
Site Furnishings (1.5%)	1	LSUM	\$52,964.85	\$52,964.85
Removal of Improvements (3%)	1	LSUM	\$105,929.71	\$105,929.71
Temporary Traffic Control (3%)	1	LSUM	\$105,929.71	\$105,929.71
Drainage Improvements (5%)	1	LSUM	\$176,549.51	\$176,549.51
Landscaping (5%)	1	LSUM	\$176,549.51	\$176,549.51
Utility Relocations (5%)	1	LSUM	\$176,549.51	\$176,549.51
Mobilization (10%)	1	LSUM	\$353,099.02	\$353,099.02
Subtotal	П			\$4,713,872
Contingency 25%	$\Box$			\$1,178,468
Total	П			\$5,892,340
Engineering & Surveying Costs 15%	П			\$883,851
Construction Administration & Inspection Costs 10%	П			\$589,234
Easement & Right-of-Way Costs 5%	П			\$294,617
Grand Total	П			\$7,660,042

Table 11: X Center to Finley River Greenway Connector Trail Opinion of Probable Cost, 10ft Paved Path with 12ft Bridges

ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Clearing & Grubbing	4	AC	\$7,500.00	\$30,000.00
Linear Grading Class 1	185	STA	\$3,000.00	\$555,000.00
Compacting Subgrade	21,449	SY	\$2.00	\$42,898.00
4" Aggregate Base	21,449	SY	\$9.00	\$193,041.00
6" Concrete Pavement	20,479	SY	\$85.00	\$1,740,715.00
7" Non-reinforced Concrete (Road Base Pvmt)	150	SY	\$85.00	\$12,750.00
Bituminous Pavement Mix PG64-22 BP-1 (2")	17	TON	\$95.00	\$1,583.33
Tack Coat (0.10 GAL/SY)	150	GAL	\$5.00	\$750.00
Driveway Repairs & Reconstruction	520	SY	\$90.00	\$46,800.00
Curb Ramps	300	SY	\$135.00	\$40,500.00
Truncated Domes	240	SF	\$30.00	\$7,200.00
Concrete Curb	240	LF	\$35.00	\$8,400.00
Wayfinding Signage (1 per 0.25 MI of Trail)	14	EA	\$1,000.00	\$14,000.00
Rock Lining (100 CY per bridge abutment)	400	CY	\$85.00	\$34,000.00
24" White Stop Bars	70	LF	\$15.00	\$1,050.00
24" White Yield Markings	12	EΑ	\$50.00	\$600.00
30" White High Visibility Markings	360	LF	\$20.00	\$7,200.00
Trail Signage & Posts (2 signs per 500')	74	EA	\$350.00	\$25,900.00
Roadway Signage & Posts (4 signs per Crossing)	24	EA	\$350.00	\$8,400.00
RRFB	2	EA	\$10,000.00	\$20,000.00
Signal Modification (Pedestrian-Cyclist Upgrades)	1	EA	\$50,000.00	\$50,000.00
Seed, mulch, etc	7	ACRE	\$5,000.00	\$35,000.00
Temporary Silt Fence	18,431	LE.	\$3.00	\$55,293.00
Ditch Checks	184	EA	\$225.00	\$41,469.75
Sediment Removal	369	CY	\$40.00	\$14,744.80
Pedestrian Bridge (12' wide)	2,520	SF	\$300.00	\$756,000.00
Decorative Pedestrian Guardrail	200	LF	\$120.00	\$24,000.00
Contractor Construction Staking (1%)	1	LSUM	\$37,672.95	\$37,672.95
Site Furnishings (1.5%)	ĭ	LSUM	\$56,509.42	\$56,509.42
Removal of Improvements (3%)	1	LSUM	\$113,018.85	\$113,018.85
Temporary Traffic Control (3%)	1	LSUM	\$113,018.85	\$113,018.85
Drainage Improvements (5%)	1.	LSUM	\$188,364.74	\$188,364.74
Landscaping (5%)	1	LSUM	\$188,364.74	\$188,364.74
Utility Relocations (5%)	1	LSUM	\$188,364.74	\$188,364.74
Mobilization (10%)	1	LSUM	\$376,729.49	\$376,729.49
Subtotal	П			\$5,029,339
Contingency 25%	П			\$1,257,335
Total				\$6,286,673
Engineering & Surveying Costs 15%	П			\$943,001
Construction Administration & Inspection Costs 10%	П			\$628,667
Easement & Right-of-Way Costs 5%				\$314,334
Grand Total	$\Pi$	$\Box$		\$8,172,675
Costs Based on 2018 prices. Should include Inflation for	or each year	r beyond	2018	



# Questions?