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# APPENDIX E: CAPITAL COST ESTIMATES

FIVE FLAGS CIVIC CENTER ASSESSMENET AND STUDY Appendix E: Capital Cost Estimates





Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

D Issue	Space	Proposed Solution	Cost	15-Yea Total Cos
A Expansion/Constructio				-
1 Site Acquisition	Site	Purchase of convenience store	\$0	\$
2 Site Construction	Site	Store demolition	\$0	\$
3 Site Construction	Site	Sitework/ utility relocation	\$0	\$
4 Construction	Arena	FFC Demolition	\$0	\$
5 Construction	Arena	FFC Interior Renovation	\$0	\$
6 Construction	Arena	Roof Replacement	\$0	\$
7 Construction	Arena	Construction of 6000 seat arena and support areas	\$0	\$
3 Construction	Theatre	General interior renovation	\$0	9
A - Subtotal				\$
2 Improve building efficiency		Replace rooftop package HVAC unit and upgrade system	\$800,000	\$1,600,0
3 Deferred Maintenance				
I Improve building signage	Arena	Replace existing marquee- Project has been funded	\$100,000	\$200,0
2 Improve building efficiency	/ Arena	Replace rooftop package HVAC unit and upgrade system	\$800,000	\$1,600,0
8 Improve building efficiency	/ Arena	Replace arena lighting with dimmable LED fixtures	\$300,000	\$600,0
Improve building efficiency	/ Arena	Replace hard wired dimming system	\$48,000	\$48,00
5 Improve building envelope	e Arena	Replace arena roof	\$300,000	\$600,0
6 Improve building efficiency	/ Arena	Replace emergency generator w/ natural gas equipm't in 10 years	\$125,000	\$125,0
7 Improve building efficiency	/ Arena	Remove existing fuel oil tank in 10 years	\$200,000	\$200,0
3 Improve building envelope	e Arena	Tuck point brick on arena	\$400,000	\$700,0
Improve building envelope	e Arena	Insulate walls and roof	\$400,000	\$400,0
0 Improve building envelope	e Arena	Add gutter and drains at entry	\$30,000	\$60,0
1 Improve building circulation	n Arena	Replace elevator to bring up to code and to increase load capacity	\$150,000	\$200,0
2 Improve finishes	Arena	Paint interior of arena	\$300,000	\$600,0
3 Improve finishes	Arena	Repair concrete on arena floor	\$60,000	\$120,0
4 Improve finishes	Arena	Replace stage curtains	\$30,000	\$30,0
5 Improve building signage	Theatre	Install marquee/ awning at exterior entance	\$60,000	\$60,00
6 Improve building efficiency	/ Theatre	Replace original flyrail	\$300,000	\$450,00
7 Improve building efficiency	/ Theatre	Prepare structural grid study	\$7,000	\$7,00
8 Improve building envelope		Repair basement stone on theatre	\$50,000	\$50,00
9 Improve building envelope		Tuck point brick on theatre within 10 years	\$300,000	\$300,00
0 Improve building envelope		Replace theatre roof	\$75,000	\$150,00
1 Improve building efficiency		Replace stage lighting and provide LED fixtures in theatre lobby	\$400,000	\$550,00
2 Improve building efficiency		Replace rooftop package HVAC unit and upgrade system	\$100,000	\$100,00
3 Improve building efficiency		Replace stage lighting dimmers	\$100,000	\$140,00
4 Improve Suitaing enteriors	Theater		¢100,000	¢140,00

	B - Subtotal				\$7,590,000
с	Life Safety / Code Complianc	e			
1	Increase space on sidewalk	Arena	Remove entry vestibule and rework entrance	\$0	\$0
2	Provide added safety devices	Arena	Add defribulators and oxygen recharging stations	\$0	\$0
3	Increase access to seating	Arena	Move dressing rooms to open up eastern entrance - No solution	\$0	\$0
4	Increase entrance/ exit capacity	Arena	Add doors to exterior walls	\$0	\$0
5	Increase entrance/ exit capacity	Arena	Provide added exits in north wall	\$0	\$0
6	Improve fall protection in theatre	Theater	Provide fall protection and roof rails	\$0	\$0
7	Need EMS access to balconies	Theater	Provide new elevator with access to all levels with new platforms	\$0	\$0
	C - Subtotal				\$0

Replace window woodwork and wood structure

Paint interior of theatre and repair plaster

Replace stage curtains

Replace stage wood floor

### D Security

24 Improve finishes

25 Improve finishes

26 Improve finishes

27 Improve finishes

Theatre

Theatre

Theatre

Theatre

	ocounty				
1	Increase limited visual surveilland	eArena	Provide video camera system and security office for arena/theatre	\$0	\$0
2	Need protective barriers at exterio	o Arena	Add precast concrete bollards at entrances (24)	\$0	\$0
3	Need detention area	Arena	Provide security office	\$0	\$0
4	Improve poor box office security	Arena	Relocate box office with up to date systems	\$0	\$0
5	Improve poor box office security	Theater	Provide safe alarm for box offices	\$0	\$0
	D - Subtotal				\$0

\$50,000

\$50,000

\$25,000

\$60,000

\$75,000

\$80,000

\$25,000

\$120,000

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

Scenario 1: Status Quo with Deferred Maintenance							
				15-Year			
ID Issue	Space	Proposed Solution	Cost	Total Cost			

### E Event Marketability

1	Improve building access Arer	ena	Adjust mailing address to agree with main entrance	\$0	\$0
2	Improve building access Arer	ena	Replace ADA ramps to reduce slope	\$0	\$0
3	Reduce pull weight of entrance dc Arer	ena	Replace exterior door closers (22)	\$0	\$0
4	Premium seating Arer	ena	Provide club seating	\$0	\$0
5	Premium seating Arer	ena	Provide private and party suites	\$0	\$0
6	Cannot use dressing rooms in sun Arer	ena	Provide air conditioning and heat in locker/ dressing rooms	\$0	\$0
7	Increase dressing room capacity Arer	ena	Provide 6 large and 2 small dressing rooms	\$0	\$0
8	Improve sound seal at Blue wall Aren	ena	Replace operable wall and add east/west walls	\$0	\$0
9	Need increased arena seating car Aren	ena	No solution	\$0	\$0
10	Need increased arena seating car Aren	ena	Add seating sections to to the north and east	\$0	\$0
11	Improve inadequate exhaust syste Arer	ena	Provide smoke exhaust system	\$0	\$0
12	Cannot create ice in warm weathe Aren	ena	No solution	\$0	\$0
13	Cannot create ice in warm weathe Aren	ena	Provide new ice floor	\$0	\$0
13	Provide flexible seating arrangem Arer	ena	Replace telescopic seating with seating in separate sections	\$0	\$0
14	Increase rigging capacity and cap Arer	ena	Provide expanded rigging grid and provide 150,000 pound capacity	\$0	\$0
15	Increase height to bottom of struc Arer	ena	No solution	\$0	\$0
16	Provide better identification of ent Aren	ena	Provide enhanced exterior entrance design	\$0	\$0
17	Need increased catering capacity Arer	ena	Provide catering kitchen - No solution	\$0	\$0
18	Improve event capability Arer	ena	Provide portable staging and risers	\$0	\$0
19	Improve event capability Arer	ena	Provide folding tables	\$0	\$0
20	Need adequate wing space for sta The	eater	No solution	\$0	\$0
21	Need adequate dressing rooms The	eater	Renovate basement area to provide new dressing rooms	\$0	\$0
22	Increase rigging for sound system The	eater	Provide rigging points above the stage in the fly loft	\$0	\$0
23	Need adequate space in orchestra The	eater	Rework orchestra pit floor and add lift	\$0	\$0
24	Improve event capability The	eater	Provide concert grand piano for theatre and arena	\$0	\$0
25	Improve event capability The	eater	Provide upright piano	\$0	\$0
26	Improve event capability The	eater	Provide folding tables	\$0	\$0
27	Improve event capability The	eater	Provide Street Level offices for the Symphony	\$0	\$0
28	Improve small theatre facility The	eater	Provide upgrades for black box theatre (Allowance)	\$0	\$0
29	Increase theatre seating capacity The	eater	Renovate third floor balcony (Allowance) in 10 years	\$0	\$0
	E - Subtotal				\$0
-					

#### F Patron Amenities

1	Improve poor wi-fi access	Arena	Provide updated wi-fi system	\$0	\$0
2	Provide weather cover at entran	ce Arena	Add entrance canopy	\$0	\$0
3	Improve ADA and box office acc	ce: Arena	Provide drop-off at new entrance (See Life Safety item above)	\$0	\$0
4	Need improved ADA access	Arena	Renovate existing toilets	\$0	\$0
5	Need improved concession serv	ic: Arena	Replace concession equipment	\$0	\$0
6	Need improved concession serv	ic∈Arena	Renovate concession stands and provide mobile carts	\$0	\$0
7	Need improved concession serv	ic∈Arena	Provide additional concession stands	\$0	\$0
8	Improve concourse finishes/ acc	ou:Arena	Replace concourse carpet and floor tile without grout joints	\$0	\$0
9	Provide stroller and wheelchair s	sto Arena	Provide new closet in concourse	\$0	\$0
10	Limited hospitalty and concours	e ¡Arena	Provide hospitality area and party suites - No solution	\$0	\$0
11	Improve poor theatre acoustics	Arena	Provide added sound absorption and reflective clouds	\$0	\$0
12	Improve patron comfort	Arena	Replace 1500 fixed seats	\$0	\$0
13	Improve patron comfort	Arena	Replace 2400 riser seats	\$0	\$0
14	Improve room acoustics	Arena	Replace arena sound system	\$0	\$0
15	Need increased toilet capacity	Theater	Renovate back existing toilet not being used	\$0	\$0
16	Improve finishes in theatre	Theater	Replace concourse carpet and floor tile without grout joints	\$0	\$0
17	Need larger theatre lobby	Theater	Renovate arena concourse to serve as expanded theatre lobby	\$0	\$0
18	Improve patron comfort	Theater	Renovate theatre historic seating	\$0	\$0
19	Improve room acoustics	Theater	Replace sound system	\$0	\$0
	F - Subtotal				\$0

### G Operations

1 Need 2" deck under telescopic se Arena Provide 2" concrete fill under west telescopic risers \$0

\$0

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

) Issue		Space	Proposed Solution	Cost	15-Yea Total Cos
Improve ineffic	ient electrical syst	er Arena	Increase electrical capacity (1200 amps) and provide shore power	\$0	\$
Improve ineffic	ient electrical syst	er Arena	Replace feeder cable with 4/0, 5 wire cable	\$5,000	\$5,00
Improve inade	quate loading are	asArena	Provide loading dock with 3 service bays and compactor	\$0	\$
Improve numb	er and image of o	ffi Arena	Renovate existing administrative office area	\$0	\$
Upgrade produ	ction capabilities	Arena	Remodel press box as a production area	\$0	\$
Upgrade produ	ction capabilities	Arena	Provide arena curtain trussing	\$0	\$
Upgrade produ	ction capabilities	Arena	Provide 21 chain hoists	\$0	\$
Upgrade produ	ction capabilities	Arena	Provide 2 chain hoist motor controls and control cable	\$0	\$
) Upgrade produ	ction capabilities	Arena	Provide double hung lighting truss	\$0	\$
1 Need more spa	ace for snow remo	varena	Improve access to exterior plaza and sidewalk areas (Allowance)	\$0	\$
2 Improve limited	grease trap capa	ac Arena	Provide additional under counter traps in concession stands	\$0	\$
3 Need upgrade	d equipment	Arena	Replace follower spotlights (4)	\$0	\$
A Need upgrade	d equipment	Arena	Provide basketball floor with new finish and storage carts	\$0	\$
5 Need upgrade	d equipment	Arena	Remove existing goals from structure and replace basketball goals	\$0	\$
6 Improve ineffic	ient electrical syst	er Theatre	Provide shore power at theatre	\$0	\$
7 Improve ineffic	ient mechanical s	ys Theatre	Replace steam HVAC system with ducted air system in theatre	\$0	9
B Need upgrade	d equipment	Theatre	Replace theatre follower spotlights (2)	\$0	9
B Need increase	d theatre rigging o	ca Theatre	Provide structural modifications for front of stage rigging system	\$0	\$
9 Improve inade	quate office areas	5 Theatre	Upgrade theatre office and production areas	\$0	\$

CONSTRUCTION COST	\$7,595,000
FEES, FF&E, SOFT COSTS, CONTINGENCY	\$1,139,250
TOTAL - SCENARIO 1	\$8,734,250

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

Theatre Replace theatre roof

Theatre

Theatre

Theatre

Theatre

Issue	Space	Proposed Solution	Cost	15-ץ Total (
Expansion/Construction				
Site Acquisition	Site	Purchase of convenience store	\$0	
Site Construction	Site	Store demolition	\$0	
Site Construction	Site	Sitework/ utility relocation	\$0	
Construction	Arena	FFC Demolition	\$0	
Construction	Arena	FFC Interior Renovation	\$0	
Construction	Arena	Roof Replacement	\$0	
Construction	Arena	Construction of 6000 seat arena and support areas	\$0	
Construction	Theatre	General interior renovation	\$0	
A - Subtotal				
Deferred Maintenance	Arena	Replace existing marguee- Project has been funded	\$100,000	\$200,
Improve building efficiency	Arena	Replace rooftop package HVAC unit and upgrade system	\$800,000	
Improve building efficiency	Arena	Replace arena lighting with dimmable LED fixtures	\$300,000	\$600,
Improve building efficiency Improve building efficiency	Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system	\$300,000 \$48,000	\$600, \$48,
Improve building efficiency Improve building efficiency Improve building envelope	Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof	\$300,000 \$48,000 \$300,000	\$600, \$48, \$600,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency	Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years	\$300,000 \$48,000 \$300,000 \$125,000	\$600, \$48, \$600, \$125,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency	Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years Remove existing fuel oil tank in 10 years	\$300,000 \$48,000 \$300,000 \$125,000 \$200,000	\$600, \$48, \$600, \$125, \$200,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope	Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years Remove existing fuel oil tank in 10 years Tuck point brick on arena	\$300,000 \$48,000 \$300,000 \$125,000 \$200,000 \$400,000	\$600, \$48, \$600, \$125, \$200, \$700,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope	Arena Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years Remove existing fuel oil tank in 10 years Tuck point brick on arena Insulate walls and roof	\$300,000 \$48,000 \$300,000 \$125,000 \$200,000 \$400,000 \$400,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope	Arena Arena Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years Remove existing fuel oil tank in 10 years Tuck point brick on arena Insulate walls and roof Add gutter and drains at entry	\$300,000 \$48,000 \$300,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$60,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building envelope	Arena Arena Arena Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures   Replace hard wired dimming system   Replace arena roof   Replace emergency generator w/ natural gas equipm't in 10 years   Remove existing fuel oil tank in 10 years   Tuck point brick on arena   Insulate walls and roof   Add gutter and drains at entry   Replace elevator to bring up to code and to increase load capacity	\$300,000 \$48,000 \$300,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$60, \$200,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building circulation Improve finishes	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures   Replace hard wired dimming system   Replace arena roof   Replace emergency generator w/ natural gas equipm't in 10 years   Remove existing fuel oil tank in 10 years   Tuck point brick on arena   Insulate walls and roof   Add gutter and drains at entry   Replace elevator to bring up to code and to increase load capacity   Paint interior of arena	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000 \$300,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$60, \$200, \$600,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building circulation Improve finishes Improve finishes	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years Remove existing fuel oil tank in 10 years Tuck point brick on arena Insulate walls and roof Add gutter and drains at entry Replace elevator to bring up to code and to increase load capacity Paint interior of arena Repair concrete on arena floor	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000 \$300,000 \$60,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$60, \$200, \$600, \$120,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building circulation Improve finishes Improve finishes	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena	Replace arena lighting with dimmable LED fixtures Replace hard wired dimming system Replace arena roof Replace emergency generator w/ natural gas equipm't in 10 years Remove existing fuel oil tank in 10 years Tuck point brick on arena Insulate walls and roof Add gutter and drains at entry Replace elevator to bring up to code and to increase load capacity Paint interior of arena Repair concrete on arena floor Replace stage curtains	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000 \$300,000 \$300,000 \$300,000 \$300,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$600, \$200, \$600, \$120, \$30,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building circulation Improve finishes Improve finishes Improve finishes Improve finishes	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Theatre	Replace arena lighting with dimmable LED fixtures   Replace hard wired dimming system   Replace arena roof   Replace emergency generator w/ natural gas equipm't in 10 years   Remove existing fuel oil tank in 10 years   Tuck point brick on arena   Insulate walls and roof   Add gutter and drains at entry   Replace elevator to bring up to code and to increase load capacity   Paint interior of arena   Replace stage curtains   Install marquee/ awning at exterior entance	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000 \$300,000 \$30,000 \$30,000 \$60,000 \$30,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$200, \$200, \$600, \$120, \$30, \$60,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building circulation Improve finishes Improve finishes Improve finishes Improve finishes Improve building signage Improve building efficiency	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Theatre Theatre	Replace arena lighting with dimmable LED fixtures   Replace hard wired dimming system   Replace arena roof   Replace emergency generator w/ natural gas equipm't in 10 years   Remove existing fuel oil tank in 10 years   Tuck point brick on arena   Insulate walls and roof   Add gutter and drains at entry   Replace elevator to bring up to code and to increase load capacity   Paint interior of arena   Replace stage curtains   Install marquee/ awning at exterior entance   Replace original flyrail	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000 \$300,000 \$60,000 \$300,000 \$300,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$200, \$450, \$200, \$200, \$400, \$200, \$
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building circulation Improve finishes Improve finishes Improve finishes Improve building signage Improve building efficiency Improve building efficiency	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Theatre Theatre Theatre	Replace arena lighting with dimmable LED fixtures   Replace hard wired dimming system   Replace arena roof   Replace emergency generator w/ natural gas equipm't in 10 years   Remove existing fuel oil tank in 10 years   Tuck point brick on arena   Insulate walls and roof   Add gutter and drains at entry   Replace elevator to bring up to code and to increase load capacity   Paint interior of arena   Replace stage curtains   Install marquee/ awning at exterior entance   Replace original flyrail   Prepare structural grid study	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$30,000 \$300,000 \$300,000 \$300,000 \$300,000 \$300,000 \$300,000 \$7,000	\$1,600,0 \$600,0 \$48,0 \$600,0 \$125,0 \$200,0 \$700,0 \$400,0 \$600,0 \$2000,0 \$600,0 \$120,0 \$600,0 \$400,0 \$600,0 \$120,0 \$600,0 \$120,0 \$600,0 \$120,0 \$600,0 \$125,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$120,0 \$155,0 \$120,0 \$155,0\$155,0\$155,0\$155,0\$155,0\$155,
Improve building efficiency Improve building efficiency Improve building envelope Improve building efficiency Improve building efficiency Improve building envelope Improve building envelope Improve building envelope Improve building circulation Improve finishes Improve finishes Improve finishes Improve finishes Improve building signage Improve building efficiency	Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Arena Theatre Theatre	Replace arena lighting with dimmable LED fixtures   Replace hard wired dimming system   Replace arena roof   Replace emergency generator w/ natural gas equipm't in 10 years   Remove existing fuel oil tank in 10 years   Tuck point brick on arena   Insulate walls and roof   Add gutter and drains at entry   Replace elevator to bring up to code and to increase load capacity   Paint interior of arena   Replace stage curtains   Install marquee/ awning at exterior entance   Replace original flyrail	\$300,000 \$48,000 \$125,000 \$200,000 \$400,000 \$400,000 \$30,000 \$150,000 \$300,000 \$60,000 \$300,000 \$300,000	\$600, \$48, \$600, \$125, \$200, \$700, \$400, \$200, \$200, \$600, \$120, \$330, \$600, \$120, \$330, \$450,

### C Life Safety / Code Compliance

20 Improve building envelope

21 Improve building efficiency

22 Improve building efficiency

23 Improve building efficiency

24 Improve finishes

25 Improve finishes

26 Improve finishes

27 Improve finishes

B - Subtotal

1	Increase space on sidewalk	Arena	Remove entry vestibule and rework entrance	\$110,000	\$110,000
2	Provide added safety devices	Arena	Add defribulators and oxygen recharging stations	\$15,000	\$15,000
3	Increase access to seating	Arena	Move dressing rooms to open up eastern entrance - No solution	\$0	\$0
4	Increase entrance/ exit capacity	Arena	Add doors to exterior walls	\$24,000	\$48,000
5	Increase entrance/ exit capacity	Arena	Provide added exits in north wall - No solution	\$0	\$0
6	Improve fall protection in theatre	Theater	Provide fall protection and roof rails	\$85,000	\$125,000
7	Need EMS access to balconies	Theater	Provide new elevator with access to all levels with new platforms	\$250,000	\$285,000
	C - Subtotal				\$583,000

Replace stage lighting and provide LED fixtures in theatre lobby

Theatre Replace rooftop package HVAC unit and upgrade system

Replace window woodwork and wood structure

Replace stage lighting dimmers

Theatre Paint interior of theatre and repair plaster

Replace stage curtains

Theatre Replace stage wood floor

#### D Security

1	Increase limited visual surveillance	Arena	Provide video camera system and security office for arena/theatre	\$250,000	\$350,000
2	Need protective barriers at exterior	Arena	Add precast concrete bollards at entrances (24)	\$50,000	\$50,000
3	Need detention area	Arena	Provide security office	\$35,000	\$35,000
4	Improve poor box office security	Arena	Relocate box office with up to date systems	\$85,000	\$130,000
5	Improve poor box office security	Theater	Provide safe alarm for box offices	\$15,000	\$15,000
	D - Subtotal				\$580,000

#### E Event Marketability

\$75,000

\$400,000

\$100,000

\$100,000

\$50,000

\$50,000

\$25,000

\$60,000

\$375,000

\$550,000

\$100,000

\$140,000

\$75,000

\$80,000 \$25,000

\$120,000

\$7,590,000

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

#### Scenario 2: Deferred Maintenance and Limited Renovation 15-Year ID Issue **Total Cost** Space **Proposed Solution** Cost 1 Improve building access Arena Adjust mailing address to agree with main entrance \$0 \$0 \$17,500 \$17,500 2 Improve building access Arena Replace ADA ramps to reduce slope Reduce pull weight of entrance doors 3 Arena Replace exterior door closers (22) \$5,500 \$5,500 4 Premium seating Arena Provide club seating \$150,000 \$150,000 5 Premium seating Arena Provide private and party suites - No solution \$0 \$0 6 Cannot use dressing rooms in summer Provide air conditioning and heat in locker/ dressing rooms \$300,000 \$400,000 Arena 7 Increase dressing room capacity Arena Provide 6 large and 2 small dressing rooms - No solution \$0 \$0 Improve sound seal at Blue wall Replace operable wall and add east/west walls \$505,000 \$505,000 8 Arena 9 Need increased arena seating capacity Arena No solution \$0 \$0 Add seating sections to to the north and east \$0 \$0 10 Need increased arena seating capacity Arena \$250,000 \$250,000 11 Improve inadequate exhaust system Arena Provide smoke exhaust system 12 Cannot create ice in warm weather Arena No solution \$0 \$0 13 Cannot create ice in warm weather Arena Provide new ice floor \$0 \$0 \$1,300,000 13 Provide flexible seating arrangements Arena Replace telescopic seating with seating in separate sections \$1,300,000 14 Increase rigging capacity and capability Arena Provide expanded rigging grid and provide 150,000 pound capacity \$80,000 \$80,000 15 Increase height to bottom of structure Arena No solution \$0 \$0 16 Provide better identification of entrances Arena Provide enhanced exterior entrance design \$250.000 \$350.000 17 Need increased catering capacity Provide catering kitchen - No solution \$0 \$0 Arena \$85,000 \$85.000 18 Improve event capability Arena Provide portable staging and risers 19 Improve event capability Arena Provide folding tables \$25,000 \$25,000 20 Need adequate wing space for stage Theater No solution \$0 \$0 21 Need adequate dressing rooms Theater Renovate basement area to provide new dressing rooms \$150,000 \$150,000 22 Increase rigging for sound system Theater Provide rigging points above the stage in the fly loft \$35,000 \$35,000 23 Need adequate space in orchestra pit Theater Rework orchestra pit floor and add lift \$300,000 \$300,000 24 Improve event capability Theater Provide concert grand piano for theatre and arena \$180,000 \$180,000 25 Improve event capability Theater Provide upright piano \$17,500 \$17,500 26 Improve event capability Theater Provide folding tables \$15,000 \$15,000 27 Improve event capability Theater Provide Street Level offices for the Symphony \$0 \$0 28 Improve small theatre facility Theater Provide upgrades for black box theatre (Allowance) \$150,000 \$225,000 29 Increase theatre seating capacity Theater Renovate third floor balcony (Allowance) in 10 years \$350,000 \$350,000 E - Subtotal \$4,440,500

#### F Patron Amenities

	F - Subtotal				\$6,800,000
19	Improve room acoustics	Theater	Replace sound system	\$100,000	\$170,000
18	Improve patron comfort	Theater	Renovate theatre historic seating	\$187,500	\$375,000
17	Need larger theatre lobby	Theater	Renovate arena concourse to serve as expanded theatre lobby	\$65,000	\$65,000
16	Improve finishes in theatre	Theater	Replace concourse carpet and floor tile without grout joints	\$45,000	\$65,000
15	Need increased toilet capacity	Theater	Renovate back existing toilet not being used	\$75,000	\$75,000
14	Improve room acoustics	Arena	Replace arena sound system	\$550,000	\$825,000
13	Improve patron comfort	Arena	Replace 2400 riser seats	\$1,560,000	\$1,560,000
12	Improve patron comfort	Arena	Replace 1500 fixed seats	\$300,000	\$300,000
11	Improve poor theatre acoustics	Arena	Provide added sound absorption and reflective clouds	\$65,000	\$65,000
10	Limited hospitalty and concourse areas	Arena	Provide hospitality area and party suites - No solution	\$0	\$0
9	Provide stroller and wheelchair storage	Arena	Provide new closet in concourse	\$15,000	\$15,000
8	Improve concourse finishes/ acoustics	Arena	Replace concourse carpet and floor tile without grout joints	\$150,000	\$210,000
7	Need improved concession service	Arena	Provide additional concession stands	\$0	\$0
6	Need improved concession service	Arena	Renovate concession stands and provide mobile carts	\$800,000	\$1,300,000
5	Need improved concession service	Arena	Replace concession equipment	\$60,000	\$250,000
4	Need improved ADA access	Arena	Renovate existing toilets	\$1,000,000	\$1,000,000
3	Improve ADA and box office access	Arena	Provide drop-off at new entrance (See Life Safety item above)	\$0	\$0
2	Provide weather cover at entrance	Arena	Add entrance canopy	\$75,000	\$75,000
1	Improve poor wi-fi access	Arena	Provide updated wi-fi system	\$250,000	\$450,000

#### G Operations

1	Need 2" deck under telescopic seating	Arena	Provide 2" concrete fill under west telescopic risers	\$27,500	\$27,500
2	Improve inefficient electrical systems	Arena	Increase electrical capacity (1200 amps) and provide shore power	\$175,000	\$175,000
3	Improve inefficient electrical systems	Arena	Replace feeder cable with 4/0, 5 wire cable	\$5,000	\$5,000
4	Improve inadequate loading areas	Arena	Provide loading dock with 3 service bays and compactor	\$75,000	\$75,000
5	Improve number and image of offices	Arena	Renovate existing administrative office area	\$210,000	\$210,000
6	Upgrade production capabilities	Arena	Remodel press box as a production area	\$75,000	\$75,000
7	Upgrade production capabilities	Arena	Provide arena curtain trussing	\$50,000	\$50,000

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

D	Issue	Space	Proposed Solution	Cost	15-Year Total Cost
8	Upgrade production capabilities	Arena	Provide 21 chain hoists	\$85,000	\$170,000
9	Upgrade production capabilities	Arena	Provide 2 chain hoist motor controls and control cable	\$20,000	\$40,000
10	Upgrade production capabilities	Arena	Provide double hung lighting truss	\$0	\$100,000
11	Need more space for snow removal	Arena	Improve access to exterior plaza and sidewalk areas (Allowance)	\$0	\$25,000
2	Improve limited grease trap capacity	Arena	Provide additional under counter traps in concession stands	\$0	\$40,000
13	Need upgraded equipment	Arena	Replace follower spotlights (4)	\$0	\$100,000
4	Need upgraded equipment	Arena	Provide basketball floor with new finish and storage carts	\$0	\$300,000
15	Need upgraded equipment	Arena	Remove existing goals from structure and replace basketball goals	\$0	\$100,000
16	Improve inefficient electrical systems	Theatre	Provide shore power at theatre	\$0	\$75,00
17	Improve inefficient mechanical systems	Theatre	Replace steam HVAC system with ducted air system in theatre	\$0	\$500,00
8	Need upgraded equipment	Theatre	Replace theatre follower spotlights (2)	\$0	\$50,00
18	Need increased theatre rigging capacity	Theatre	Provide structural modifications for front of stage rigging system	\$0	\$300,000
19	Improve inadequate office areas	Theatre	Upgrade theatre office and production areas	\$0	\$50,000
	G - Subtotal				\$2,467,500
	CONSTRUCTION COST				\$22,461,000
	FEED FEET OOFT OOOTO OONTING				\$3,369,150
	FEES, FF&E, SOFT COSTS, CONTING	SENCY			\$3,309,13

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

ID_	Issue	Space	Proposed Solution	Cost	Total Co
、	Expansion/Construction				
<u>.</u> I	Site Acquisition	Site	Purchase of convenience store	\$1,000,000	\$1,000,0
2	Site Construction	Site	Store demolition	\$125,000	\$125,0
;	Site Construction	Site	Sitework/ utility relocation	\$2,500,000	\$2,500,0
ŀ	Construction	Arena	FFC Demolition	\$0	, ,,.
;	Construction	Arena	FFC Interior Renovation	\$5,920,685	\$5,920,5
5	Construction	Arena	Roof Replacement	\$3,100,800	\$3,100,8
	Construction	Arena	Construction of 6000 seat arena addition and support areas	\$20,145,550	\$20,145,5
;	Construction	Theatre	General interior renovation	\$1,190,930	\$1,190,9
	A - Subtotal			. , ,	\$33,982,8
}	Deferred Maintenance Improve building signage	Arena	Replace existing marquee- Project has been funded	\$100,000	\$100,0
2	Improve building efficiency	Arena	Replace rooftop package HVAC unit and upgrade system	\$0	, .
;	Improve building efficiency	Arena	Replace arena lighting with dimmable LED fixtures	\$0	
ŀ	Improve building efficiency	Arena	Replace hard wired dimming system	\$0	
5	Improve building envelope	Arena	Replace arena roof	\$0	
6	Improve building efficiency	Arena	Replace emergency generator w/ natural gas equipm't in 10 years	\$0	
7	Improve building efficiency	Arena	Remove existing fuel oil tank in 10 years	\$0	
;	Improve building envelope	Arena	Tuck point brick on arena	\$400,000	\$700,0
)	Improve building envelope	Arena	Insulate walls and roof	\$0	
C	Improve building envelope	Arena	Add gutter and drains at entry	\$0	
1	Improve building circulation	Arena	Replace elevator to bring up to code - In construction cost	\$0	
2	Improve finishes	Arena	Paint interior of arena	\$0	
3	Improve finishes	Arena	Repair concrete on arena floor	\$60,000	\$120,0
4	Improve finishes	Arena	Replace stage curtains - In construction cost	\$0	
5	Improve building signage	Theatre	Install marquee/ awning at exterior entance	\$60,000	\$60,0
6	Improve building efficiency	Theatre	Replace original flyrail	\$300,000	\$450,0
7	Improve building efficiency	Theatre	Prepare structural grid study	\$7,000	\$7,0
8	Improve building envelope	Theatre	Repair basement stone on theatre	\$50,000	\$50,0
9	Improve building envelope	Theatre	Tuck point brick on theatre within 10 years	\$300,000	\$300,0
C	Improve building envelope	Theatre	Replace theatre roof	\$75,000	\$150,0
1	Improve building efficiency	Theatre	Replace stage lighting and provide LED fixtures in theatre lobby	\$400,000	\$550,0
2	Improve building efficiency	Theatre	Replace rooftop package HVAC unit and upgrade system	\$100,000	\$100,0
3	1 0 1	Theatre	Replace stage lighting dimmers	\$100,000	\$140,0
4	Improve finishes	Theatre	Replace window woodwork and wood structure	\$50,000	\$75,0
5	Improve finishes	Theatre	Replace stage curtains	\$50,000	\$80,0
	Improve finishes		Replace stage wood floor	\$25,000	\$25,0
~	Incomence finishes	Theaten	Deint interior of the other and remain pleater	000 000	\$120

с	Life Safety / Code Compliance				
1	Increase space on sidewalk	Arena	Remove entry vestibule and rework entrance	\$0	\$0
2	Provide added safety devices	Arena	Add defribulators and oxygen recharging stations	\$15,000	\$15,000
3	Increase access to seating	Arena	Move dressing rooms at eastern entrance - In construction cost	\$0	\$0
4	Increase entrance/ exit capacity	Arena	Add doors to exterior walls	\$0	\$0
5	Increase entrance/ exit capacity	Arena	Provide added exits in north wall - In construction cost	\$0	\$0
6	Improve fall protection in theatre	Theater	Provide fall protection and roof rails	\$85,000	\$125,000
7	Need EMS access to balconies	Theater	Provide new elevator with access to all levels with new platforms	\$250,000	\$285,000
	C - Subtotal				\$425,000

Theatre Paint interior of theatre and repair plaster

#### D Security

27 Improve finishes

B - Subtotal

1	Increase limited visual surveillance	Arena	Provide video camera system and security office for arena/theatre	\$250,000	\$350,000
2	Need protective barriers at exterior	Arena	Add precast concrete bollards at entrances (24)	\$50,000	\$50,000
3	Need detention area	Arena	Provide security office - In construction cost	\$0	\$0
4	Improve poor box office security	Arena	Relocate box office with up to date systems - In construction cost	\$0	\$0
5	Improve poor box office security	Theater	Provide safe alarm for box offices - In construction cost	\$0	\$0
	D - Subtotal				\$400,000

\$60,000

\$120,000

\$3,027,000

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

#### Scenario 3: Deferred Maintenance, Interior Theatre Renovation, and Addition to Existing Five Flags Center 15-Year ID Issue Space Proposed Solution Cost **Total Cost** Event Marketability Е Improve building access Arena Adjust mailing address to agree with main entrance \$0 \$0 1 2 Improve building access Arena Replace ADA ramps to reduce slope \$0 \$0 3 Reduce pull weight of entrance doors Arena Replace exterior door closers (22) \$0 \$0 Premium seating 4 Arena Provide club seating \$0 \$0 5 Premium seating Arena Provide private and party suites - In construction cost \$0 \$0 6 Cannot use dressing rooms in summer Provide HVAC to locker/ dressing rooms- In construction cost \$0 \$0 Arena 7 Increase dressing room capacity Arena Provide 6 large and 2 small dressing rooms- In construction cost \$0 \$0 8 Improve sound seal at Blue wall \$0 \$0 Arena Replace operable wall - In construction cost 9 Add seating sections to the north and east - In construction cost \$0 \$0 Need increased arena seating capacity Arena 10 \$0 \$0 Improve inadequate exhaust system Arena Provide smoke exhaust system- In construction cost 11 Cannot create ice in warm weather Arena Provide new ice floor - In construction cost \$0 \$0 \$1,300,000 \$1,300,000 12 Provide flexible seating arrangements Arena Replace telescopic seating with seating in separate sections 13 Increase rigging capacity and capability Arena Provide 150,000 pound rigging grid - In construction cost \$0 \$0 Increase height to bottom of structure Arena Remove existing structure and raise roof - In construction cost \$0 \$0 14 15 Provide better identification of entrances Provide enhanced exterior entrance design - In construction cost \$0 \$0 Arena 16 Need increased catering capacity Arena Provide catering kitchen - In construction cost \$0 \$0 17 Improve event capability Arena Provide portable staging and risers - In FF&E \$0 \$0 Provide folding tables - In FF&E \$0 \$0 18 Improve event capability Arena 19 Need adequate wing space for stage \$0 \$0 Theater No solution Theater Renovate Street Level for new dressing rooms - In construction cost \$0 20 Need adequate dressing rooms \$0 \$35,000 \$35,000 21 Increase rigging for sound system Theater Provide rigging points above the stage in the fly loft 22 Need adequate space in orchestra pit Theater Rework orchestra pit floor and add lift \$300,000 \$300,000 Theater Provide upright piano 23 Improve event capability \$17,500 \$17,500 \$180,000 \$180,000 Theater Provide concert grand piano for theatre and arena 24 Improve event capability 25 Improve event capability Theater Provide folding tables - In FF&E \$0 \$0 \$0 26 Improve event capability Theater Provide Street Level offices for Symphony - In construction cost \$0 \$150,000 \$225,000 27 Improve small theatre facility Theater Provide upgrades for black box theatre (Allowance) \$350.000 28 Increase theatre seating capacity Theater Renovate third floor balcony (Allowance) in 10 years \$350.000

E - Subtotal

#### F Patron Amenities

1	Improve poor wi-fi access	Arena	Provide updated wi-fi system - In construction cost	\$0	\$0
2	Provide weather cover at entrance	Arena	Add entrance canopy - In construction cost	\$0	\$0
3	Improve ADA and box office access	Arena	Provide drop-off at new entrance (See Life Safety item above)	\$0	\$0
4	Need improved ADA access	Arena	Renovate existing toilets and add fixtures - In construction cost	\$0	\$0
5	Need improved concession service	Arena	Replace concession equipment	\$60,000	\$250,000
6	Need improved concession service	Arena	Renovate concession stands and add mobile carts - In construction cos	\$0	\$0
7	Need improved concession service	Arena	Add concession stands and merchandising - In construction cost	\$0	\$0
8	Improve concourse finishes/ acoustics	Arena	Replace concourse carpet and floor tile without grout joints - In constru	\$0	\$0
9	Provide stroller and wheelchair storage	Arena	Provide new closet in concourse - In construction cost	\$0	\$0
10	Limited hospitalty and concourse areas	Arena	Provide hospitality area and party suites - In construction cost	\$0	\$0
11	Improve poor theatre acoustics	Arena	Provide added sound absorption and reflective clouds	\$65,000	\$65,000
12	Improve patron comfort	Arena	Replace 1500 fixed seats	\$337,500	\$337,500
13	Improve patron comfort	Arena	Replace 2400 riser seats	\$0	\$0
14	Improve room acoustics	Arena	Replace arena sound system - In construction cost	\$0	\$0
15	Need increased toilet capacity	Theater	Provide new Street Level toilets - In construction cost	\$0	\$0
16	Improve finishes in theatre	Theater	Replace concourse carpet and floor tile without grout joints	\$45,000	\$65,000
17	Need larger theatre lobby	Theater	Renovate Street Level as expanded theatre lobby - In construction cos	\$0	\$0
18	Improve patron comfort	Theater	Renovate theatre historic seating	\$187,500	\$375,000
19	Improve room acoustics	Theater	Replace sound system	\$100,000	\$170,000
	F - Subtotal				\$1,262,500

#### G Operations

1	Need 2" deck under telescopic seating	Arena	Provide 2" concrete fill under west telescopic risers - In construction cos	\$0	\$0
2	Improve inefficient electrical systems	Arena	Increase electrical capacity (1200 amps) and provide shore power - In c	\$0	\$0
3	Improve inefficient electrical systems	Arena	Replace feeder cable with 4/0, 5 wire cable - In construction cost	\$0	\$0
4	Improve inadequate loading areas	Arena	Provide loading dock with 3 service bays and compactor - In constructic	\$0	\$0
5	Improve number and image of offices	Arena	Renovate existing administrative office area - In construction cost	\$0	\$0

\$2,407,500

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

Sc	Scenario 3: Deferred Maintenance, Interior Theatre Renovation, and Addition to Existing Five Flags Center							
ID	Issue	Space	Proposed Solution	Cost	Total Cost			
6	Upgrade production capabilities	Arena	Remodel press box as a production area - In construction cost	\$0	\$0			
7	Upgrade production capabilities	Arena	Provide arena curtain trussing - In construction cost	\$0	\$0			
8	Upgrade production capabilities	Arena	Provide 21 chain hoists	\$85,000	\$170,000			
9	Upgrade production capabilities	Arena	Provide 2 chain hoist motor controls and control cable	\$20,000	\$40,000			
10	Upgrade production capabilities	Arena	Provide double hung lighting truss - In construction cost	\$0	\$0			
11	Need more space for snow removal	Arena	Improve access to exterior plaza and sidewalk areas - In construction c	\$0	\$0			
12	Improve limited grease trap capacity	Arena	Provide additional under counter traps in concession stands - In constru	\$0	\$0			
13	Need upgraded equipment	Arena	Replace follower spotlights (4) - In FF&E	\$0	\$0			
14	Need upgraded equipment	Arena	Provide basketball floor with new finish and storage carts - In FF&E	\$0	\$0			
15	Need upgraded equipment	Arena	Remove existing goals from structure and replace basketball goals - In	\$0	\$0			
16	Improve staff efficiency	Arena	Provide 2 production offices - In Construction Cost	\$0	\$0			
17	Eliminate circulation conflicts	Arena	Provide new dressing rooms on north side - In Construction Cost	\$0	\$0			
18	Eliminate circulation conflicts	Arena	Provide storage space on north side - In Construction Cost	\$0	\$0			
19	Need storage space	Arena	Provide staging space in the back-of-house - In Construction Cost	\$0	\$0			
20	Improve proximity of concession storage	Arena	Provide centrally located commissary - In Construction Cost	\$0	\$0			
21	Need cold concession storage	Arena	Provide cold storage in each new stand - In Construction Cost	\$0	\$0			
22	Need more food prep space for catering	Arena	Provide catering kitchen - In Construction Cost	\$0	\$0			
23	Need more space for tornado protection	Arena	Provide added safe areas - In Construction Cost	\$0	\$0			
24	Need space for scene shop and storage	Theatre	Renovate Street Level to create space - In Construction Cost	\$0	\$0			
25	Improve inefficient electrical systems	Theatre	Provide shore power at theatre	\$75,000	\$75,000			
26	Improve inefficient mechanical systems	Theatre	Replace steam HVAC system with ducted air system in theatre	\$500,000	\$500,000			
27	Need upgraded equipment	Theatre	Replace theatre follower spotlights (2)	\$30,000	\$50,000			
28	Need increased theatre rigging capacity	Theatre	Provide structural modifications for front of stage rigging system	\$300,000	\$300,000			
29	Improve inadequate office areas	Theatre	Upgrade theatre office and production areas - In construction cost	\$0	\$0			
	G - Subtotal				\$1,135,000			
	CONSTRUCTION COST				\$42,639,865			
	FEES, FF&E, SOFT COSTS, CONTING	FNCY			\$6,395,980			
	TOTAL - SCENARIO 3				\$49,035,845			

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

### Scenario 4: Deferred Maintenance, Interior Theatre Renovation, and New Arena Construction

					15-Year
ID	Issue	Space	Proposed Solution	Cost	Total Cost
А	Expansion/Construction				
1	Site Acquisition	Site	Purchase of convenience store	\$1,000,000	\$1,000,000
2	Site Construction	Site	Store demolition	\$125,000	\$125,000
3	Site Construction	Site	Sitework/ utility relocation	\$2,750,000	\$2,750,000
4	Construction	Arena	FFC Demolition	\$1,345,212	\$1,345,212
5	Construction	Arena	FFC Interior Renovation	\$142,500	\$142,500
6	Construction	Arena	Roof Replacement	\$0	\$0
7	Construction	Arena	Construction of 6000 seat arena and support areas	\$48,847,870	\$48,847,870
8	Construction	Theatre	General interior renovation	\$856,635	\$856,635
	A - Subtotal				\$55,067,217

#### B Deferred Maintenance

	Defensed Maintenance				
1	Improve building signage	Arena	Replace existing marquee- Project has been funded	\$100,000	\$100,000
2	Improve building efficiency	Arena	Replace rooftop package HVAC unit and upgrade system	\$0	\$0
3	Improve building efficiency	Arena	Replace arena lighting with dimmable LED fixtures	\$0	\$0
4	Improve building efficiency	Arena	Replace hard wired dimming system	\$0	\$0
5	Improve building envelope	Arena	Replace arena roof	\$0	\$0
6	Improve building efficiency	Arena	Replace emergency generator w/ natural gas equipm't in 10 years	\$0	\$0
7	Improve building efficiency	Arena	Remove existing fuel oil tank in 10 years	\$0	\$0
8	Improve building envelope	Arena	Tuck point brick on arena	\$400,000	\$700,000
9	Improve building envelope	Arena	Insulate walls and roof	\$0	\$0
10	Improve building envelope	Arena	Add gutter and drains at entry	\$0	\$0
11	Improve building circulation	Arena	Replace elevator to bring up to code - In construction cost	\$0	\$0
12	Improve finishes	Arena	Paint interior of arena	\$0	\$0
13	Improve finishes	Arena	Repair concrete on arena floor	\$60,000	\$120,000
14	Improve finishes	Arena	Replace stage curtains - In construction cost	\$0	\$0
15	Improve building signage	Theatre	Install marquee/ awning at exterior entance	\$60,000	\$60,000
16	Improve building efficiency	Theatre	Replace original flyrail	\$300,000	\$450,000
17	Improve building efficiency	Theatre	Prepare structural grid study	\$7,000	\$7,000
18	Improve building envelope	Theatre	Repair basement stone on theatre	\$50,000	\$50,000
19	Improve building envelope	Theatre	Tuck point brick on theatre within 10 years	\$300,000	\$300,000
20	Improve building envelope	Theatre	Replace theatre roof	\$75,000	\$150,000
21	Improve building efficiency	Theatre	Replace stage lighting and provide LED fixtures in theatre lobby	\$400,000	\$550,000
22	Improve building efficiency	Theatre	Replace rooftop package HVAC unit and upgrade system	\$100,000	\$100,000
23	Improve building efficiency	Theatre	Replace stage lighting dimmers	\$100,000	\$140,000
24	Improve finishes	Theatre	Replace window woodwork and wood structure	\$50,000	\$75,000
25	Improve finishes	Theatre	Replace stage curtains	\$50,000	\$80,000
26	Improve finishes	Theatre	Replace stage wood floor	\$25,000	\$25,000
27	Improve finishes	Theatre	Paint interior of theatre and repair plaster	\$60,000	\$120,000
	B - Subtotal				\$3,027,000

### C Life Safety / Code Compliance

1	Increase space on sidewalk	Arena	Remove entry vestibule and rework entrance	\$0	\$0
2	Provide added safety devices	Arena	Add defribulators and oxygen recharging stations	\$15,000	\$15,000
3	Increase access to seating	Arena	Move dressing rooms at eastern entrance - In construction cost	\$0	\$0
4	Increase entrance/ exit capacity	Arena	Add doors to exterior walls	\$0	\$0
5	Increase entrance/ exit capacity	Arena	Provide added exits in north wall - In construction cost	\$0	\$0
6	Improve fall protection in theatre	Theater	Provide fall protection and roof rails	\$85,000	\$125,000
7	Need EMS access to balconies	Theater	Provide new elevator with access to all levels with new platforms	\$250,000	\$285,000
	C - Subtotal				\$425,000

#### D Security

1	Increase limited visual surveillance	Arena	Provide video camera system and security office for arena/theatre	\$250,000	\$350,000
2	Need protective barriers at exterior	Arena	Add precast concrete bollards at entrances (24)	\$50,000	\$50,000
3	Need detention area	Arena	Provide security office - In construction cost	\$0	\$0
4	Improve poor box office security	Arena	Relocate box office with up to date systems - In construction cost	\$0	\$0
5	Improve poor box office security	Theater	Provide safe alarm for box offices - In construction cost	\$0	\$0
	D - Subtotal				\$400,000

### E Event Marketability

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

### Scenario 4: Deferred Maintenance, Interior Theatre Renovation, and New Arena Construction

					15-Year
ID	Issue	Space	Proposed Solution	Cost	Total Cost
1	Improve building access	Arena	Adjust mailing address to agree with main entrance	\$0	\$0
2	Improve building access	Arena	Replace ADA ramps to reduce slope	\$0	\$0
3	Reduce pull weight of entrance doors	Arena	Replace exterior door closers (22)	\$0	\$0
4	Premium seating	Arena	Provide club seating	\$0	\$0
5	Premium seating	Arena	Provide private and party suites - In construction cost	\$0	\$0
6	Cannot use dressing rooms in summer	Arena	Provide HVAC to locker/ dressing rooms- In construction cost	\$0	\$0
7	Increase dressing room capacity	Arena	Provide 6 large and 2 small dressing rooms- In construction cost	\$0	\$0
8	Improve sound seal at Blue wall	Arena	Replace operable wall - In construction cost	\$0	\$0
9	Need increased arena seating capacity	Arena	Add seating sections to the north and east - In construction cost	\$0	\$0
10	Improve inadequate exhaust system	Arena	Provide smoke exhaust system- In construction cost	\$0	\$0
11	Cannot create ice in warm weather	Arena	Provide new ice floor - In construction cost	\$0	\$0
12	Provide flexible seating arrangements	Arena	Replace telescopic seating with seating in separate sections - In constru-	\$0	\$0
13	Increase rigging capacity and capability	Arena	Provide 150,000 pound rigging grid - In construction cost	\$0	\$0
14	Increase height to bottom of structure	Arena	Remove existing structure and raise roof - In construction cost	\$0	\$0
15	Provide better identification of entrances	Arena	Provide enhanced exterior entrance design - In construction cost	\$0	\$0
16	Need increased catering capacity	Arena	Provide catering kitchen - In construction cost	\$0	\$0
17	Improve event capability	Arena	Provide portable staging and risers - In FF&E	\$0	\$0
18	Improve event capability	Arena	Provide folding tables - In FF&E	\$0	\$0
19	Need adequate wing space for stage	Theater	No solution	\$0	\$0
20	Need adequate dressing rooms	Theater	Renovate Street Level for new dressing rooms - In construction cost	\$0	\$0
21	Increase rigging for sound system	Theater	Provide rigging points above the stage in the fly loft	\$35,000	\$35,000
22	Need adequate space in orchestra pit	Theater	Rework orchestra pit floor and add lift	\$300,000	\$300,000
23	Improve event capability	Theater	Provide concert grand piano for theatre and arena	\$180,000	\$180,000
24	Improve event capability	Theater	Provide upright piano	\$17,500	\$17,500
25	Improve event capability	Theater	Provide folding tables - In FF&E	\$0	\$0
26	Improve event capability	Theater	Provide Street Level offices for Symphony - In construction cost	\$0	\$0
27	Improve small theatre facility	Theater	Provide upgrades for black box theatre (Allowance)	\$150,000	\$225,000
28	Increase theatre seating capacity	Theater	Renovate third floor balcony (Allowance) in 10 years	\$350,000	\$350,000

### E - Subtotal

## \$1,107,500

F	Patron Amenities				
1	Improve poor wi-fi access Arena Provide updated wi-fi system - In construction cost		\$0	\$0	
2	Provide weather cover at entrance	Arena	Add entrance canopy - In construction cost	\$0	\$0
3	Improve ADA and box office access	Arena	Provide drop-off at new entrance (See Life Safety item above)	\$0	\$0
4	Need improved ADA access	Arena	Renovate existing toilets and add fixtures - In construction cost	\$0	\$0
5	Need improved concession service	Arena	Replace concession equipment	\$60,000	\$250,000
6	Need improved concession service	Arena	Renovate concession stands and add mobile carts - In construction cost	\$0	\$0
7	Need improved concession service	Arena	Add concession stands and merchandising - In construction cost	\$0	\$0
8	Improve concourse finishes/ acoustics	Arena	Replace concourse carpet and floor tile without grout joints - In construc	\$0	\$0
9	Provide stroller and wheelchair storage	Arena	Arena Provide new closet in concourse - In construction cost		\$0
10	Limited hospitalty and concourse areas	Arena	Provide hospitality area and party suites - In construction cost		\$0
11	Improve poor theatre acoustics	Arena Provide added sound absorption and reflective clouds		\$65,000	\$65,000
12	Improve patron comfort	Arena	Replace 1500 fixed seats	\$0	\$0
13	Improve patron comfort	Arena	Replace 2400 riser seats - In construction cost	\$0	\$0
14	Improve room acoustics	Arena	Replace arena sound system - In construction cost	\$0	\$0
15	Need increased toilet capacity	Theater	Provide new Street Level toilets - In construction cost	\$0	\$0
16	Improve finishes in theatre	Theater	Replace concourse carpet and floor tile without grout joints	\$45,000	\$65,000
17	Need larger theatre lobby	Theater	Renovate Street Level as expanded theatre lobby - In construction cost	\$0	\$0
18	Improve patron comfort	Theater	Renovate theatre historic seating	\$187,500	\$375,000
19	Improve room acoustics	Theater	Replace sound system	\$100,000	\$170,000
	F - Subtotal				\$925,000

#### G Operations

1	Need 2" deck under telescopic seating	Arena	Provide 2" concrete fill under west telescopic risers - In construction cost	\$0	\$0
2	Improve inefficient electrical systems	Arena	Increase electrical capacity (1200 amps) and provide shore power - In co	\$0	\$0
3	Improve inefficient electrical systems	Arena	Replace feeder cable with 4/0, 5 wire cable - In construction cost	\$0	\$0
4	Improve inadequate loading areas	Arena	Provide loading docks with compactor - In construction cost	\$0	\$0
5	Improve number and image of offices	Arena	Renovate existing administrative office area - In construction cost	\$0	\$0
6	Upgrade production capabilities	Arena	Remodel press box as a production area - In construction cost	\$0	\$0
7	Upgrade production capabilities	Arena	Provide arena curtain trussing - In construction cost	\$0	\$0

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

### Scenario 4: Deferred Maintenance, Interior Theatre Renovation, and New Arena Construction

ID	lssue	Space	Proposed Solution	Cost	15-Year Total Cost
8	Upgrade production capabilities	Arena	Provide 21 chain hoists	\$85,000	\$170,000
9	Upgrade production capabilities	Arena	Provide 2 chain hoist motor controls and control cable	\$20,000	\$40,000
10	Upgrade production capabilities	Arena	Provide double hung lighting truss - In construction cost	\$0	\$0
11	Need more space for snow removal	Arena	Improve access to exterior plaza and sidewalk areas - In construction co	\$0	\$0
12	Improve limited grease trap capacity	Arena	Provide additional under counter traps in concession stands - In constru-	\$0	\$0
13	Need upgraded equipment	Arena	Replace follower spotlights (4) - In FF&E	\$0	\$0
14	Need upgraded equipment	Arena	Provide basketball floor with new finish and storage carts - In FF&E	\$0	\$0
15	Need upgraded equipment	Arena	Remove existing goals from structure and replace basketball goals - In F	\$0	\$0
16	Improve staff efficiency	Arena	Provide 2 production offices - In Construction Cost	\$0	\$0
17	Eliminate circulation conflicts	Arena Provide new dressing rooms on north side - In Construction Cost		\$0	\$0
18	Eliminate circulation conflicts	Arena	na Provide storage space on north side - In Construction Cost		\$0
19	Need storage space	Arena	Provide staging space in the back-of-house - In Construction Cost	\$0	\$0
20	Improve proximity of concession storage	Arena	Provide centrally located commissary - In Construction Cost	\$0	\$0
21	Need cold concession storage	Arena	Provide cold storage in each new stand - In Construction Cost	\$0	\$0
22	Need more food prep space for catering	Arena	Provide catering kitchen - In Construction Cost	\$0	\$0
23	Need more space for tornado protection	Arena	Provide added safe areas - In Construction Cost	\$0	\$0
24	Need space for scene shop and storage	Theatre	Renovate Street Level to create space - In Construction Cost	\$0	\$0
25	Improve inefficient electrical systems	Theatre	Provide shore power at theatre	\$75,000	\$75,000
26	Improve inefficient mechanical systems	Theatre	Replace steam HVAC system with ducted air system in theatre	\$500,000	\$500,000
27	Need upgraded equipment	Theatre	Replace theatre follower spotlights (2)	\$30,000	\$50,000
28	Need increased theatre rigging capacity	Theatre	Provide structural modifications for front of stage rigging system	\$300,000	\$300,000
29	Improve inadequate office areas	Theatre	Upgrade theatre office and production areas - In construction cost	\$0	\$0
	G - Subtotal				\$1,135,000
_	CONSTRUCTION COST				\$62 086 717

CONSTRUCTION COST	\$62,086,717
FEES, FF&E, SOFT COSTS, CONTINGENCY	\$9,313,008
TOTAL - SCENARIO 4	\$71,399,725

Comparison of Estimated Capital Construction, Repair & Replacement Costs over 15-Yr Projection Period (All figures are shown in current 2018 dollars)

## **Upfront Capital Costs**

	Scenario	Scenario	Scenario	Scenario
Cost By Type	1	2	3	4
Expansion/Construction	\$0	\$0	\$33,982,865	\$55,067,217
Deferred Maintenance	\$4,070,000	\$4,070,000	\$1,712,000	\$1,712,000
Life Safety / Code Compliance	\$0	\$484,000	\$350,000	\$350,000
Security	\$0	\$435,000	\$300,000	\$300,000
Event Marketability	\$0	\$3,815,500	\$1,982,500	\$682,500
Patron Amenities	\$0	\$5,297,500	\$795,000	\$457,500
Operations	\$5,000	\$2,102,500	\$1,010,000	\$1,010,000
Hard Construction Costs	\$4,075,000	\$16,204,500	\$40,132,365	\$59,579,217
Soft Construction Costs	\$611,250	\$2,430,675	\$6,019,855	\$8,936,883
Total Construction Costs	\$4,686,250	\$18,635,175	\$46,152,220	\$68,516,100

## **Upfront Plus Capital Costs Years 1-15**

	Scenario	Scenario	Scenario	Scenario
Cost By Type	1	2	3	4
Expansion/Construction	\$0	\$0	\$33,982,865	\$55,067,217
Deferred Maintenance	\$7,590,000	\$7,590,000	\$3,027,000	\$3,027,000
Life Safety / Code Compliance	\$0	\$583,000	\$425,000	\$425,000
Security	\$0	\$580,000	\$400,000	\$400,000
Event Marketability	\$0	\$4,440,500	\$2,407,500	\$1,107,500
Patron Amenities	\$0	\$6,800,000	\$1,262,500	\$925,000
Operations	\$5,000	\$2,467,500	\$1,135,000	\$1,135,000
Hard Construction Costs	\$7,595,000	\$22,461,000	\$42,639,865	\$62,086,717
Soft Construction Costs	\$1,139,250	\$3,369,150	\$6,395,980	\$9,313,008
Total Construction Costs	\$8,734,250	\$25,830,150	\$49,035,845	\$71,399,725