

SUSTAINABLE COMPETITIVENESS INDEX

Lower Score is Higher Ranking

Metropolitan Regions	Rank Order				Sustainable Competitiveness Index	
	Economic Element	Envt Element	Equity Element	Balance Element	Score	Rank
	Austin-San Marcos, TX (AUS)	6	1	5	6	18
Raleigh-Durham, NC (RAL)	9	10	9	1	29	2
Minneapolis-St. Paul, MN (MIN)	4	11	11	7	33	3
Denver-Boulder, CO (DEN)	5	2	14	15	36	4
Seattle-Tacoma, WA (STA)	3	8	13	17	41	5
Orange, CA (ORA)	13	11	14	4	42	6
Atlanta, GA (ATL)	15	15	3	10	43	7
Washington, DC (WAS)	7	21	4	11	43	7
San Diego, CA (SAN)	10	3	19	12	44	9
San Jose, CA (SJE)	2	16	6	20	44	9
Portland-Salem, OR-WA (POR)	11	5	20	9	45	11
San Francisco, CA (SFO)	1	3	22	22	48	12
Boston, MA-NH NECMA (BOS)	8	22	6	14	50	13
Pittsburgh, PA (PIT)	15	16	1	18	50	13
Baltimore, MD (BAL)	14	20	14	3	51	15
Houston, TX (HOU)	12	19	18	2	51	15
Norfolk-Va Beach VA (NOR)	22	6	2	21	51	15
United States (USA)	18	18	12	5	53	18
Sacramento, CA (SAC)	19	14	14	8	55	19
Tampa-St. Pete., FL (TAM)	20	11	8	16	55	19
Phoenix-Mesa, AZ (PHO)	17	6	20	13	56	21
Miami-Ft Lauderdale, FL (MIA)	21	9	10	19	59	22

Weighting Scheme: Each element accounts for 25% of the Index score.

The Balance Element is the Coefficient of Variation or the variance from the normalized scores for the Economic, Environment and Equity Elements.

03-Aug-02

Balance Element Summary

Lower Score is Higher Ranking

Computed from the Normalized Scores for the Economic, Environment and Equity Elements

	2000 Balance Element		Economic		Environment		Equity	
	Variance	Rank	Score	Rank	Score	Rank	Score	Rank
Raleigh-Durham, NC (RAL)	29.6	1	147	9	160	10	156	9
Houston, TX (HOU)	40.2	2	189	12	200	19	204	18
Baltimore, MD (BAL)	113.6	3	195	14	220	20	201	14
Orange, CA (ORA)	169.6	4	192	13	170	11	201	14
United States (USA)	626.0	5	243	18	195	18	186	12
Austin-San Marcos, TX (AUS)	644.2	6	120	6	85	1	147	5
Minneapolis-St.Paul, MN (MIN)	910.9	7	105	4	170	11	168	11
Sacramento, CA (SAC)	1,110.2	8	255	19	175	14	201	14
Portland-Salem, OR-WA (POR)	1,317.6	9	180	11	125	5	213	20
Atlanta, GA (ATL)	1,429.6	10	201	15	185	15	114	3
Washington, DC (WAS)	1,754.0	11	132	7	225	21	141	4
San Diego, CA (SAN)	1,784.0	12	171	10	105	3	207	19
Phoenix-Mesa, AZ (PHO)	1,784.2	13	225	17	130	6	213	20
Boston, MA-NH NECMA (BOS)	1,793.6	14	141	8	235	22	150	6
Denver-Boulder, CO (DEN)	2,046.9	15	111	5	100	2	201	14
Tampa-St. Pete., FL (TAM)	2,117.6	16	258	20	170	11	153	8
Seattle-Tacoma, WA (STA)	2,166.0	17	78	3	135	8	192	13
Pittsburgh, PA (PIT)	2,220.2	18	201	15	190	16	96	1
Miami-Ft Lauderdale, FL (MIA)	2,546.9	19	264	21	155	9	159	10
San Jose, CA (SJE)	3,256.9	20	54	2	190	16	150	6
Norfolk-Va Beach VA (NOR)	6,520.2	21	291	22	130	6	111	2
San Francisco, CA (SFO)	6,696.0	22	33	1	105	3	231	22

Notes: The normalization is done to insure each element has equal weighting.
 The variance is a statistical term and represents the degree of spread of a data set.
 It is calculated by subtracting each observation from the mean, squaring the differences, summing all the squared differences, and dividing the sum by the number of observations.

The Balance Element accounts for one fourth of the Sustainable Competitiveness Index.

11-May-02

Normalizing the Element Scores

Lower Score is Higher Ranking

Composed of the Economic Element, the Equity Element and the Environment Element

Metropolitan Regions	Normalized Composite		Economy Normalized		Environment Normalized		Equity Normalized	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Austin-San Marcos, TX (AUS)	352	1	120	6	85	1	147	5
San Francisco, CA (SFO)	369	2	33	1	105	3	231	22
San Jose, CA (SJE)	394	3	54	2	190	16	150	6
Seattle-Tacoma, WA (STA)	405	4	78	3	135	8	192	13
Denver-Boulder, CO (DEN)	412	5	111	5	100	2	201	14
Minneapolis-St. Paul, MN (MIN)	443	6	105	4	170	11	168	11
Raleigh-Durham, NC (RAL)	463	7	147	9	160	10	156	9
San Diego, CA (SAN)	483	8	171	10	105	3	207	19
Pittsburgh, PA (PIT)	487	9	201	15	190	16	96	1
Washington, DC (WAS)	498	10	132	7	225	21	141	4
Atlanta, GA (ATL)	500	11	201	15	185	15	114	3
Portland-Salem, OR-WA (POR)	518	12	180	11	125	5	213	20
Boston, MA-NH NECMA (BOS)	526	13	141	8	235	22	150	6
Norfolk-Va Beach VA (NOR)	532	14	291	22	130	6	111	2
Orange, CA (ORA)	563	15	192	13	170	11	201	14
Phoenix-Mesa, AZ (PHO)	568	16	225	17	130	6	213	20
Miami-Ft Lauderdale, FL (MIA)	578	17	264	21	155	9	159	10
Tampa-St. Pete., FL (TAM)	581	18	258	20	170	11	153	8
Houston, TX (HOU)	593	19	189	12	200	19	204	18
Baltimore, MD (BAL)	616	20	195	14	220	20	201	14
United States (USA)	624	21	243	18	195	18	186	12
Sacramento, CA (SAC)	631	22	255	19	175	14	201	14

Weighting Scheme: Each element equals one third of the composite score. Due to the different number of components in each element, the element scores are multiplied by different factors. These factors are the following:

- Economic Element score is multiplied by three [3]
- Environment Element score is multiplied by five [5]
- Equity Element score is multiplied by three [3]

Note: The element scores are normalized and the composite is computed for use in the calculation of the variance.

Economic Element Summary

Lower Score is Higher Ranking

	2000 Economic Element		Standard of Living	Business Investment	Capital Facilities Investment	Innovation	Educational Level of Attainment
Metropolitan Regions	Score	Rank	Rank	Rank	Rank	Rank	Rank
San Francisco, CA (SFO)	11	1	1	2	4	3	1
San Jose, CA (SJE)	18	2	2	1	12	1	2
Seattle-Tacoma, WA (STA)	26	3	3	7	2	11	3
Minneapolis-St.Paul, MN (MIN)	35	4	7	16	1	5	6
Denver-Boulder, CO (DEN)	37	5	6	4	13	9	5
Austin-San Marcos, TX (AUS)	40	6	13	3	15	2	7
Washington, DC (WAS)	44	7	4	10	6	16	8
Boston, MA-NH NECMA (BOS)	47	8	5	5	22	6	9
Raleigh-Durham, NC (RAL)	49	9	12	9	20	4	4
San Diego, CA (SAN)	57	10	16	6	14	7	14
Portland-Salem, OR-WA (POR)	60	11	15	13	11	10	11
Houston, TX (HOU)	63	12	9	18	5	11	20
Orange, CA (ORA)	64	13	8	14	19	8	15
Baltimore, MD (BAL)	65	14	14	11	3	18	19
Atlanta, GA (ATL)	67	15	11	8	18	17	13
Pittsburgh, PA (PIT)	67	15	9	19	8	14	17
Phoenix-Mesa, AZ (PHO)	75	17	20	17	9	13	16
United States (USA)	81	18	19	12	17	15	18
Sacramento, CA (SAC)	85	19	17	21	16	19	12
Tampa-St. Pete., FL (TAM)	86	20	18	20	7	20	21
Miami-Ft Lauderdale, FL (MIA)	88	21	21	14	10	21	22
Norfolk-Va Beach VA (NOR)	97	22	22	22	21	22	10

The Economic Element accounts for one fourth of the Sustainable Competitiveness Index.

03-Aug-02

Environment Element Summary

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	2000 Environment Element		Air Quality	Water Quality	Capital Facilities Investment
	Score	Rank	Rank	Rank	Rank
Metropolitan Regions					
Austin-San Marcos, TX (AUS)	17	1	12	2	3
Denver-Boulder, CO (DEN)	20	2	8	1	11
San Diego, CA (SAN)	21	3	18	2	1
San Francisco, CA (SFO)	21	3	1	2	18
Portland-Salem, OR-WA (POR)	25	5	1	11	13
Norfolk-Va Beach VA (NOR)	26	6	11	11	4
Phoenix-Mesa, AZ (PHO)	26	6	16	2	8
Seattle-Tacoma, WA (STA)	27	8	6	16	5
Miami-Ft Lauderdale, FL (MIA)	31	9	1	11	19
Raleigh-Durham, NC (RAL)	32	10	14	2	16
Minneapolis-St.Paul, MN (MIN)	34	11	1	21	12
Orange, CA (ORA)	34	11	9	16	9
Tampa-St. Pete., FL (TAM)	34	11	12	16	6
Sacramento, CA (SAC)	35	14	21	7	7
Atlanta, GA (ATL)	37	15	20	7	10
Pittsburgh, PA (PIT)	38	16	9	7	22
San Jose, CA (SJE)	38	16	1	16	21
United States (USA)	39	18	14	10	15
Houston, TX (HOU)	40	19	22	16	2
Baltimore, MD (BAL)	44	20	19	11	14
Washington, DC (WAS)	45	21	17	11	17
Boston, MA-NH NECMA (BOS)	47	22	6	21	20

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Equity Element Summary

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	2000 Equity Element		Income Distribution	Housing Affordability	Average Commute	Capital Facilites Investment	Education % Preschool in Ed Prog
Metropolitan Regions	Score	Rank	Rank	Rank	Rank	Rank	Rank
Pittsburgh, PA (PIT)	32	1	7	8	5	5	7
Norfolk-Va Beach VA (NOR)	37	2	1	6	1	21	8
Atlanta, GA (ATL)	38	3	5	4	22	3	4
Washington, DC (WAS)	47	4	22	2	21	1	1
Austin-San Marcos, TX (AUS)	49	5	4	13	10	12	10
Boston, MA-NH NECMA (BOS)	50	6	12	16	18	2	2
San Jose, CA (SJE)	50	6	6	21	3	4	16
Tampa-St. Pete., FL (TAM)	51	8	18	3	6	18	6
Raleigh-Durham, NC (RAL)	52	9	3	11	2	19	17
Miami-Ft Lauderdale, FL (MIA)	53	10	19	10	7	14	3
Minneapolis-St.Paul, MN (MIN)	56	11	17	1	17	16	5
United States (USA)	62	12	13	12	13	10	14
Seattle-Tacoma, WA (STA)	64	13	16	17	11	7	13
Baltimore, MD (BAL)	67	14	8	5	20	22	12
Denver-Boulder, CO (DEN)	67	14	10	14	19	15	9
Orange, CA (ORA)	67	14	9	18	9	13	18
Sacramento, CA (SAC)	67	14	2	15	8	20	22
Houston, TX (HOU)	68	18	20	9	16	8	15
San Diego, CA (SAN)	69	19	15	20	4	11	19
Phoenix-Mesa, AZ (PHO)	71	20	11	7	15	17	21
Portland-Salem, OR-WA (POR)	71	20	14	19	12	6	20
San Francisco, CA (SFO)	77	22	21	22	14	9	11

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