

Table 4A - With 11/2013 RRC Land Use and Civic Area Plan (East) Scenario B High - With Alt. Mode Increase and Utilization Increase Downtown Boulder Parking Supply and Demand Model

Last Updated: 5/1/2014



- Key Assumptions:**
- *** **Weekday Mid-day Peak Period Evaluation** ⁽¹⁰⁾
 - *** **With Revised Zoning in the DT5 District**
 - *** **With Downtown Visitor and Employee Alternative Mode Use Increasing from 60% to 67% Over Time**
 - *** **With CAGID Parking Structure Space Utilization Increasing by 5% Over Time**
 - *** **With Civic Area Plan input on east end of CAP area - Scenario B High**

Existing Downtown Boulder Parking Supply and Demand Rates and Comparable Institute of Transportation Engineers (ITE) info.:	
Current Commercial Parking SUPPLY Rate in CAGID Area:	2.17 spaces per 1,000 sq. ft.
Comparable ITE Average Commercial Parking SUPPLY Rate:	7.25 spaces per 1,000 sq. ft.
Current Commercial Parking DEMAND Rate in CAGID Area:	1.48 spaces per 1,000 sq. ft.
Comparable ITE Average Commercial Parking DEMAND Rate:	4.7 spaces per 1,000 sq. ft.
Current Residential Parking SUPPLY Rate In CAGID Area:	1.6 spaces per DU
Comparable ITE Residential Parking Supply Rate:	1.4 spaces per DU
Current Residential Parking DEMAND Rate In CAGID Area:	0.97 spaces per DU
Current ITE Downtown Residential Parking Demand Rate:	1.00 spaces per DU
Aggregate non-driver mode share for downtown access:	60%
Aggregate SOV or MOV driver mode share for downtown access:	40%
(this includes long term (employees) and short term visitors of downtown based on latest survey information)	

	Planning Horizon				Subtotal 2012 - 2022+	Buildout Total
	Existing	2012 - 2016	2017 - 2021	2022 +		
Downtown Boulder Development By Planning Horizon ⁽¹⁾						
Residential Units (DUs)	235	21	61	98	180	415
Commercial Floor Area (sq. ft.), includes 11/2013 RRC info. N&S of Canyon + CAP East High Only	3,127,229	279,661	527,598	617,691	1,424,950	4,552,179
Employees - full time	5,942				0	5,942
Employees - part time	2,260				0	2,260
Employees - full time equivalent	7,298	860	1,510	1,445	3,815	11,113
Parking Supply and Demand Increases And Supply Reductions ⁽²⁾						
Residential Parking Supply ⁽⁴⁾	376	34	98	157	288	664
Residential Parking Demand ⁽⁵⁾	228	20	59	95	175	403
Commercial Parking Supply ⁽⁴⁾	6,675	607	1,145	1,340	3,092	9,767
Commercial Parking Demand ⁽⁵⁾	4,548	414	781	914	2,109	6,657
Total Parking Supply - residential and commercial	7,051	640	1,242	1,497	3,380	10,431
Total Parking Demand - residential and commercial	4,776	434	840	1,009	2,284	7,060
Existing parking space supply displaced by new development ⁽³⁾	0	260	107	61	428	428
Existing parking space demand displaced by new development ⁽⁶⁾	0	177	73	52	302	302
Incremental parking supply increase due to development at existing supply rates:	0	900	1,349	1,558	3,808	3,808
Cumulative parking supply increase due to new development at existing supply rates:	0	900	2,250	3,808	3,808	3,808
Incremental COMMERCIAL parking demand increase due to new development at existing demand rates:	0	591	854	966	2,410	2,410
Cumulative COMMERCIAL parking demand increase due to new development at existing demand rates:	0	591	1,444	2,410	2,410	2,410
Commercial Parking Space Demand Reductions: Parking Space Equivalents (PSEs) ⁽⁷⁾						
if downtown "non-driver" access increases to 67% by Year 2022:						
Projected alternative mode use access (non-driver):	60%	62%	64%	67%	67%	67%
Projected commercial parking demand rate over time (spaces per KSF):	1.45	1.42	1.34	1.23	1.23	1.23
Cumulative PSEs due to increase in alternative mode use by new downtown users ⁽⁸⁾	0	(10)	(92)	(320)	(320)	(320)
PSEs due to increase in alternative mode use by existing downtown users ⁽⁹⁾	0	(227)	(455)	(796)	(796)	(796)
Total Cumulative Parking Demand Increase After Considering Increased Alternative Mode Use:	0	354	897	1,295	1,295	1,295
Parking Space Equivalents by Increasing CAGID "Parking Structure" Space Utilization ⁽¹¹⁾						
Percent increase in existing parking space utilization:		0%	5%	5%	5%	5%
CAGID structured parking spaces available		2209	2209	2409	2,409	2,409
PSEs realized from increased space utilization:		0	(110)	(120)	(120)	(120)
Parking Space Equivalents by Increasing PRIVATE Parking Space Utilization ⁽¹²⁾						
Percent increase in existing parking space utilization:		0%	0%	0%	0%	0%
Private spaces available in lots and structures (excludes alley spaces)	3061	3176	3179	3189	3,189	3189
PSEs realized from increased space utilization:		0	0	0	0	0
Potential Physical Parking Space Supply Increases:						
Developer built commercial parking at Daily Camera building	0	300	0	0	300	300
Large lot developer built parking (such as Colorado Building or the Wells Fargo lots)	0	0	100	0	100	100
Small lot developer built parking supply	0	75	10	10	95	95
CAGID / Private joint venture parking structure	0	0	0	0	0	0
CAP East End Parking: Net supply increase of 400 spaces for office uses plus CAGID lots replaced	0	0	250	150	400	400
New CAGID parking structure (possibly at the Broadway/Spruce lot)	0	0	0	200	200	200
Subtotal: Physical Parking Space Supply Increase	0	375	360	360	1,095	1,095
Cumulative Physical Parking Space Supply Increase:	0	375	735	1,095	1,095	1,095
Cumulative Unmet Commercial Parking Demand:	0	21	-52	-79	-79	-79
surplus or deficit	surplus	deficit	deficit	deficit	deficit	deficit
Total Cumulative Non-Residential Parking Supply:	6,675	7,050	7,410	7,770	7,770	7,770

Notes:

- 1 All land use and development projections provided by RRC and/or CAGID
- 2 Parking supply and demand rates based on existing parking supply and demand inventory
- 3 Assumes that the Daily Camera structure and Colorado Building lot is consumed by construction by 2016 and the Wells Fargo lot is consumed by construction by 2021
- 4 Future parking supply based on current parking supply rates in the CAGID area
- 5 Future parking demand based on current parking demand rates in the CAGID area
- 6 Existing demand in these displaced lots estimated at average existing demand rate of 68%
- 7 A parking space equivalent (PSE) is a parking space that is not physically needed due to access to the downtown area by an alternative to the single occupant or multi-occupant automobile driver that would otherwise have needed to park in the downtown area.
- 8 An alternative mode use increase will decrease the demand for parking, and may result from a variety of TDM measures (ECO passes, Bike Station, etc.) and external factors such as the price of fuel. This factor estimates the impact of increasing the alternative mode use by NEW downtown users associated with NEW development.
- 9 This factor estimates the larger impact of increasing the alternative mode use by the EXISTING downtown users.
- 10 This parking model analyzes the weekday mid-day parking supply and demand in the CAGID area of downtown Boulder. This weekday mid-day peak likely has the highest CAGID-wide parking demand, but it should be noted that there are other peak times where there are even higher localized parking demands in the downtown area, such as on Friday evening when the parking structure: and on-street spaces west of Broadway are full, or on weekend days when the parking structures east of Broadway can become full.
- 11 Assumes that the existing 73% utilization rate of CAGID parking structures is increased over time
- 12 Assumes that the existing 61% utilization rate of PRIVATE parking is increased over time
- 13 This model includes RRC land use from 11/2013 for CAGID north and south of Canyon Plus Civic Area Plan East End Only which includes office uses, etc. The CAP East analysis assumes CAGID lots are replaced and 400 new spaces are added specifically for the office type uses in this east end area. Other special event uses and their associated parking is not addressed in this scenario for either the east or west ends of the civic area.

**Table 4B - With 11/2013 RRC Land Use but No New Civic Area Plan Development Within The CAP Area
Downtown Boulder Parking Supply and Demand Model**

Last Updated:

5/1/2014



Key Assumptions:
 *** **Weekday Mid-day Peak Period Evaluation** ⁽¹⁰⁾
 *** **With Revised Zoning in the DT5 District**
 *** **With Downtown Visitor and Employee Alternative Mode Use Increasing from 60% to 67% Over Time**
 *** **With CAGID Parking Structure Space Utilization Increasing by 5% Over Time**
 *** **With no new Civic Area Plan development on east end of CAP area and no new CAP parking**

Existing Downtown Boulder Parking Supply and Demand Rates and Comparable Institute of Transportation Engineers (ITE) info.:	
Current Commercial Parking SUPPLY Rate in CAGID Area:	2.17 spaces per 1,000 sq. ft.
Comparable ITE Average Commercial Parking SUPPLY Rate:	7.25 spaces per 1,000 sq. ft.
Current Commercial Parking DEMAND Rate in CAGID Area:	1.48 spaces per 1,000 sq. ft.
Comparable ITE Average Commercial Parking DEMAND Rate:	4.7 spaces per 1,000 sq. ft.
Current Residential Parking SUPPLY Rate In CAGID Area:	1.6 spaces per DU
Comparable ITE Residential Parking Supply Rate:	1.4 spaces per DU
Current Residential Parking DEMAND Rate In CAGID Area:	0.97 spaces per DU
Current ITE Downtown Residential Parking Demand Rate:	1.00 spaces per DU
Aggregate non-driver mode share for downtown access:	60%
Aggregate SOV or MOV driver mode share for downtown access:	40%
(this includes long term (employees) and short term visitors of downtown based on latest survey information)	

	Planning Horizon				Subtotal 2012 - 2022+	Buildout Total
	Existing	2012 - 2016	2017 - 2021	2022 +		
Downtown Boulder Development By Planning Horizon⁽¹⁾						
Residential Units (DUs)	235	21	61	98	180	415
Commercial Floor Area (sq. ft.), includes 11/2013 RRC info. N&S of Canyon But no CAP East	3,084,709	279,661	364,118	518,690	1,162,469	4,247,178
Employees - full time	5,942				0	5,942
Employees - part time	2,260				0	2,260
Employees - full time equivalent	7,298	860	1,510	1,445	3,815	11,113
Parking Supply and Demand Increases And Supply Reductions⁽²⁾						
Residential Parking Supply ⁽⁴⁾	376	34	98	157	288	664
Residential Parking Demand ⁽⁵⁾	228	20	59	95	175	403
Commercial Parking Supply ⁽⁴⁾	6,675	607	790	1,126	2,523	9,198
Commercial Parking Demand ⁽⁵⁾	4,548	414	539	768	1,720	6,268
Total Parking Supply - residential and commercial	7,051	640	888	1,282	2,811	9,862
Total Parking Demand - residential and commercial	4,776	434	598	863	1,895	6,671
Existing parking space supply displaced by new development ⁽³⁾	0	260	107	61	428	428
Existing parking space demand displaced by new development ⁽⁶⁾	0	177	73	52	302	302
Incremental parking supply increase due to development at existing supply rates:	0	900	995	1,343	3,239	3,239
Cumulative parking supply increase due to new development at existing supply rates:	0	900	1,895	3,239	3,239	3,239
Incremental COMMERCIAL parking demand increase due to new development at existing demand rates:	0	591	612	820	2,022	2,022
Cumulative COMMERCIAL parking demand increase due to new development at existing demand rates:	0	591	1,202	2,022	2,022	2,022
Commercial Parking Space Demand Reductions: Parking Space Equivalents (PSEs)⁽⁷⁾						
if downtown "non-driver" access increases to 67% by Year 2022:						
Projected alternative mode use access (non-driver):	60%	62%	64%	67%	67%	67%
Projected commercial parking demand rate over time (spaces per KSF):	1.47	1.42	1.34	1.23	1.23	1.23
Cumulative PSEs due to increase in alternative mode use by new downtown users ⁽⁸⁾	0	(15)	(87)	(284)	(284)	(284)
PSEs due to increase in alternative mode use by existing downtown users ⁽⁹⁾	0	(227)	(455)	(796)	(796)	(796)
Total Cumulative Parking Demand Increase After Considering Increased Alternative Mode Use:	0	348	661	942	942	942
Parking Space Equivalents by Increasing CAGID "Parking Structure" Space Utilization⁽¹¹⁾						
Percent increase in existing parking space utilization:		0%	5%	5%	5%	5%
CAGID structured parking spaces available		2209	2209	2409	2,409	2409
PSEs realized from increased space utilization:		0	(110)	(120)	(120)	(120)
Parking Space Equivalents by Increasing PRIVATE Parking Space Utilization⁽¹²⁾						
Percent increase in existing parking space utilization:		0%	0%	0%	0%	0%
Private spaces available in lots and structures (excludes alley spaces)	3061	3176	3179	3189	3,189	3189
PSEs realized from increased space utilization:		0	0	0	0	0
Potential Physical Parking Space Supply Increases:						
Developer built commercial parking at Daily Camera building	0	300	0	0	300	300
Large lot developer built parking (such as Colorado Building or the Wells Fargo lots)	0	0	100	0	100	100
Small lot developer built parking supply	0	75	10	10	95	95
CAGID / Private joint venture parking structure	0	0	0	0	0	0
No new CAP East End Parking	0	0	0	0	0	0
New CAGID parking structure (possibly at the Broadway/Spruce lot)	0	0	0	200	200	200
Subtotal: Physical Parking Space Supply Increase	0	375	110	210	695	695
Cumulative Physical Parking Space Supply Increase:	0	375	485	695	695	695
Cumulative Unmet Commercial Parking Demand: surplus or deficit	0	27	-66	-127	-127	-127
Total Cumulative Non-Residential Parking Supply:	6,675	7,050	7,160	7,370	7,370	7,370

Notes:

- All land use and development projections provided by RRC and/or CAGID
- Parking supply and demand rates based on existing parking supply and demand inventory
- Assumes that the Daily Camera structure and Colorado Building lot is consumed by construction by 2016 and the Wells Fargo lot is consumed by construction by 2021
- Future parking supply based on current parking supply rates in the CAGID area
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- Existing demand in these displaced lots estimated at average existing demand rate of 68%
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- Assumes that the existing 73% utilization rate of CAGID parking structures is increased over time
- Assumes that the existing 61% utilization rate of PRIVATE parking is increased over time
- This model includes RRC land use from 11/2013 for CAGID north and south of Canyon but no new development on Civic Area East End.

**Table 4C - With 11/2013 RRC Land Use and Civic Area Plan (East) Scenario B High But No New Mode Shift of Efficiencies
Downtown Boulder Parking Supply and Demand Model**

Last Updated: 5/1/2014



Key Assumptions:

- *** **Weekday Mid-day Peak Period Evaluation** ⁽¹⁰⁾
- *** **With Revised Zoning in the DT5 District**
- *** **With Downtown Visitor and Employee Alternative Mode Use Increasing from 60% to 67% Over Time**
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- *** **With Civic Area Plan input on east end of CAP area - Scenario B High**

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Current Commercial Parking SUPPLY Rate in CAGID Area:	2.17 spaces per 1,000 sq. ft.
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Employees - full time	5,942				0	5,942
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Employees - full time equivalent	7,298	860	1,510	1,445	3,815	11,113
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Cumulative parking supply increase due to new development at existing supply rates:	0	900	2,250	3,808	3,808	3,808
Incremental COMMERCIAL parking demand increase due to new development at existing demand rates:	0	591	854	966	2,410	2,410
Cumulative COMMERCIAL parking demand increase due to new development at existing demand rates:	0	591	1,444	2,410	2,410	2,410
Commercial Parking Space Demand Reductions: Parking Space Equivalents (PSEs) ⁽⁷⁾						
if downtown "non-driver" access increases to 67% by Year 2022:						
Projected alternative mode use access (non-driver):	60%	60%	60%	60%	60%	60%
Projected commercial parking demand rate over time (spaces per KSF):	1.48	1.48	1.48	1.48	1.48	1.48
Cumulative PSEs due to increase in alternative mode use by new downtown users ⁽⁸⁾	0	(0)	0	0	0	0
PSEs due to increase in alternative mode use by existing downtown users ⁽⁹⁾	0	0	0	0	0	0
Total Cumulative Parking Demand Increase After Considering Increased Alternative Mode Use:	0	591	1,444	2,410	2,410	2,410
Parking Space Equivalents by Increasing CAGID "Parking Structure" Space Utilization ⁽¹¹⁾						
Percent increase in existing parking space utilization:		0%	0%	0%	0%	0%
CAGID structured parking spaces available		2209	2209	2409	2,409	2409
PSEs realized from increased space utilization:		0	0	0	0	0
Parking Space Equivalents by Increasing PRIVATE Parking Space Utilization ⁽¹²⁾						
Percent increase in existing parking space utilization:		0%	0%	0%	0%	0%
Private spaces available in lots and structures (excludes alley spaces)	3061	3176	3179	3189	3,189	3189
PSEs realized from increased space utilization:		0	0	0	0	0
Potential Physical Parking Space Supply Increases:						
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Large lot developer built parking (such as Colorado Building or the Wells Fargo lots)	0	0	100	0	100	100
Small lot developer built parking supply	0	75	10	10	95	95
CAGID / Private joint venture parking structure	0	0	0	0	0	0
CAP East End Parking: Net supply increase of 400 spaces for office uses plus CAGID lots replaced	0	0	250	150	400	400
New CAGID parking structure (possibly at the Broadway/Spruce lot)	0	0	0	200	200	200
Subtotal: Physical Parking Space Supply Increase	0	375	360	360	1,095	1,095
Cumulative Physical Parking Space Supply Increase:	0	375	735	1,095	1,095	1,095
Cumulative Unmet Commercial Parking Demand: surplus or deficit	0	-216	-709	-1,315	-1,315	-1,315
Total Cumulative Non-Residential Parking Supply:	6,675	7,050	7,410	7,770	7,770	7,770

Notes:

- 1 All land use and development projections provided by RRC and/or CAGID
- 2 Parking supply and demand rates based on existing parking supply and demand inventory
- 3 Assumes that the Daily Camera structure and Colorado Building lot is consumed by construction by 2016 and the Wells Fargo lot is consumed by construction by 2021
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- 13 This model includes RRC land use from 11/2013 for CAGID north and south of Canyon Plus Civic Area Plan East End Only which includes office uses, etc. The CAP East analysis assumes CAGID lots are replaced and 400 new spaces are added specifically for the office type uses in this east end area. Other special event uses and their associated parking is not addressed in this scenario for either the east or west ends of the civic area.

CAGID Parking Analysis

Existing Land Use:

- 3,127,000 sq. ft. of non-residential space
- 235 dwelling units
- 7,300 FTEs

Projected additional development at “buildout”:

- 1,424,950 sq. ft. of non-residential space
- 600 dwelling units
- *Includes Civic Campus uses within CAGID – Scenario B High East*

CAGID Parking Analysis

Existing Parking Supply and Demand (Tables 1 – 3):

CAGID:

- **3,659 spaces**
- **74% occupied – typical weekday daytime**

Private:

- **3392 spaces**
- **61% occupied – typical weekday daytime**

Total:

- **7,051 spaces**
- **68% occupied – typical weekday daytime**

CAGID Parking Analysis

Downtown Boulder Parking Study

Table 3. Total Public and Private Parking in Downtown Boulder⁽¹⁾



Quadrant ⁽²⁾	Public Parking Spaces				Private Parking Spaces				All Public and Private Parking Spaces
	Long Term	Short Term	NPP Commuter	Total Public	Surface Lots	Parking Structures	Alleys	Total Private	
Northwest	189	499	113	801	372	269	125	766	1,567
Southwest	458	476	0	934	0	587	5	592	1,526
Southeast	396	292	17	705	387	357	108	852	1,557
Northeast	385	617	217	1,219	529	560	93	1,182	2,401
Total	1,428	1,884	347	3,659	1,288	1,773	331	3,392	7,051

Notes:

1. Includes CAGID area and private lots at the edge of CAGID (church, Boulderado, Boulder County). Does not include Civic Campus outside of CAGID.
2. Quadrants are divided by Walnut Street and 13th Street

CAGID Parking Analysis

Calculated Parking Demand Rates:

- 1.48 spaces per 1,000 sq. ft. non-res. floor area
- 35% of comparable ITE parking demand rates

- 0.97 spaces per dwelling unit
- approx. equal to ITE rate

Buildout non-residential parking demand increase:

- 2,108 spaces
- 302 existing spaces displaced by new development
- 2,410 additional parking spaces needed at today's rates

CAGID Parking Analysis

Accommodating Additional Parking Demand

Mitigating Parking Demand Increases:

- TDM to increase alternative mode use (parking space equivalents – PSEs)
60% non-driver today **67% in the future?**
- Increase CAGID parking space utilization in structures
73% now **78% to 83% in the future?**
- Increase Private parking space utilization
61% now **66% or more in the future?**

CAGID Parking Analysis

Accommodating Additional Parking Demand **– Continued**

Build Additional Parking:

- **Private spaces (Daily Camera, Wells Fargo?)**
- **New CAGID parking structure (200 spaces at Broadway/Spruce?)**
- **CAGID / Private joint venture?**
- **New spaces in the Civic Area?**

CAGID Parking Analysis

Parking Model:

- project future parking demand in 5 year increments
- test the effectiveness of various TDM and demand reduction strategies
- CAGID parking structure?

Table 4A
Downtown Boulder Parking Supply and Demand Model

Last Updated: 11/28/2011

FOX TUTTLE
TRANSPORTATION GROUP

Parking Downtown Boulder Parking Supply and Demand Rates and Components (include of Transportation Engineers (TJE) info.)

Current Commercial Parking Supply Rate in CAGID Area: 2.11 spaces per 1,000 sq ft
 Commercial TR Average Commercial Parking Supply Rate: 2.26 spaces per 1,000 sq ft
 Current Commercial Parking (CBAMA) Rate in CAGID Area: 1.48 spaces per 1,000 sq ft
 Commercial TR Average Commercial Parking (CBAMA) Rate: 4.7 spaces per 1,000 sq ft

Current Residential Parking Supply Rate in CAGID Area: 1.6 spaces per DV
 Commercial TR Residential Parking Supply Rate: 1.4 spaces per DV
 Current Residential Parking (RBAHO) Rate in CAGID Area: 0.99 spaces per DV
 Current TR Downtown Residential Parking Demand Rate: 1.05 spaces per DV

Aggregate available mode share for downtown access: 67%
 Aggregate SOV or HOV Drive mode share for downtown access: 40%
 (This includes long term (employee) and short term visitors of downtown based on latest survey information.)

	Planning Horizon				Subtotal 2012 - 2022	Buildout Total
	Existing	2012 - 2016	2017 - 2021	2022 +		
Downtown Boulder Development by Planning Horizon¹⁾						
Residential Unit (RHU)	235	0	0	0	235	415
Commercial floor area sq. ft	3,076,411	246,166	520,412	478,885	3,268,874	4,343,546
Employees - full time	5,942	0	0	0	5,942	5,942
Employees - part time	2,100	0	0	0	2,100	2,100
Employees - full time equivalent	3,842	0	0	0	3,842	3,842
Parking Supply and Demand Increases and Supply Reductions²⁾						
Residential Parking Supply ³⁾	376	0	0	0	376	664
Residential Parking Demand ⁴⁾	226	0	0	0	226	403
Commercial Parking Supply ⁵⁾	6,675	619	1,086	1,039	9,419	9,419
Commercial Parking Demand ⁶⁾	4,546	423	741	706	6,416	6,416
Total Parking Supply - residential and commercial	7,051	619	1,086	1,039	9,795	10,083
Total Parking Demand - residential and commercial	4,772	423	741	706	6,342	6,819
Existing parking space supply displaced by new development ⁷⁾	0	141	107	0	248	206
Existing parking space demand displaced by new development ⁸⁾	0	96	73	0	169	221
Incremental parking supply increase due to new development at existing supply rates	0	793	1,290	1,239	3,341	3,341
Cumulative parking supply increase due to new development at existing supply rates	0	793	2,084	3,341	6,218	6,218
Incremental COMMERCIAL parking demand increase due to new development at existing demand rates	0	518	819	763	2,099	2,099
Cumulative COMMERCIAL parking demand increase due to new development at existing demand rates	0	518	1,333	2,092	3,943	3,943
Commercial Parking Space Demand Reductions (Parking Space Equivalents (PSE))⁹⁾						
if downtown "non-driver" access increases to 87% by Year 2022:						
Projected alternative mode use access (non-driver)	670	620	640	676	2,606	2,606
Projected commercial parking demand reduction (non-driver)	1,466	1,442	1,340	1,236	5,484	5,484
Cumulative PSE due to increase in alternative mode use by new downtown users ¹⁰⁾	0	110	108	113	331	331
PSE due to increase in alternative mode use by existing downtown users ¹¹⁾	0	1227	1450	1780	4457	4457
Total Cumulative Parking Demand Increase After Considering Increased Alternative Mode Use:	0	274	744	993	1,991	1,991
Parking Space Equivalent by Increasing CAGID "Parking Structure" Space Utilization¹²⁾						
Present increase in existing parking space utilization	0	0	0	0	0	0
CAGID structure parking space available	2726	2726	2726	2726	10,904	10,904
PSE realized from increased space utilization	0	1118	1118	1118	3464	3464
Parking Space Equivalent by Increasing PRIVATE Parking Space Utilization¹³⁾						
Present increase in existing parking space utilization	0	0	0	0	0	0
Private spaces available in lots and structures (excludes alley spaces)	3761	3269	3269	3269	13,568	13,568
PSE realized from increased space utilization	0	0	0	0	0	0
Potential Physical Parking Space Supply Increases:						
Developer built commercial parking (1000 Carora building)	0	300	0	0	300	300
Large lot developer built parking (each at Colorado Building or the Wells Fargo lot)	0	50	100	0	150	150
Small lot developer built parking supply	0	10	10	10	30	30
CAGID Private joint venture parking structure	0	0	0	0	0	0
New CAGID parking structure (possibly at the Broadway/Joyce lot)	0	0	0	0	0	0
Net total Physical Parking Space Supply Increase	0	350	110	10	470	470
Cumulative Physical Parking Space Supply Increase	0	350	470	680	1,500	1,500
Cumulative Net Commercial Parking Demand:	0	36	34	14	84	84
surplus or deficit	0	36	34	14	84	84
Total Cumulative Non-Residential Parking Supply:	6,675	7,034	7,145	7,834	10,688	10,688

Notes:

- All land use and development projections provided by BRC and/or CAGID
- Parking supply and demand rates based on existing parking supply and demand inventory
- Assumes that the data centers then transient and Colorado building lot is consumed by construction by 2016 and the Wells Fargo lot is consumed by construction by 2021
- Future parking supply based on current parking supply rates in the CAGID area
- Future parking demand based on current parking demand rates in the CAGID area
- Existing demand in these displaced lots estimated as average existing demand rate of 68%
- A parking space equivalent (PSE) is a parking space that is not physically needed due to access to the downtown area by an alternative to the single occupant or multi-occupant, automobile driver that would otherwise have needed to park in the downtown area.
- An alternative mode use increase will decrease the demand for parking, and may result from a variety of TDM measures (HOV parking, Bike Station, etc.) and external factors such as the price of fuel. This factor estimates the impact of increasing the alternative mode use by NEW downtown users associated with NEW development.
- This factor estimates the impact of increasing the alternative mode use by the EXISTING downtown users.
- This parking model includes the weekly and mid-day parking supply and demand in the CAGID area of downtown Boulder. This weekly and mid-day peak likely has the highest CAGID-wide parking demand, but it should be noted that there are other peak times throughout the downtown area, such as on Friday evening when the parking structures and on street spaces west of Broadway are full, or on weekend days when the parking structures east of Broadway can become full.
- Assumes that the existing 73% utilization rate of CAGID parking structures is increased over time
- Assumes that the existing 61% utilization rate of PRIVATE parking is increased over time

CAGID Parking Analysis

Three alternatives tested using the parking model:

Scenario / Table	Land Use Increase /Civic Area Increase	Alt. Mode Use Increase	CAGID Structure Utilization Increase	Private Lot and Structure Utilization Increase	Additional Parking Spaces Constructed (Including CAP)	Year 2016 Surplus or Deficit	Year 2021 Surplus or Deficit	Buildout Surplus or Deficit
4A	Yes/Yes	Yes	Yes 5%	No	1,095	21	-52	-79
4B	Yes/No	Yes	Yes 5%	No	695	27	-66	-127
4C	Yes/Yes	No	No	No	1095	-216	-709	-1,315