

CITY COUNCIL COMMUNICATION



Meeting Date:	July 29, 2008	Item Number:
Type of Item:	Information	
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SUBJECT/AGENDA TITLE: Quality of Life Benchmark Report for 2nd Quarter 2008

EXECUTIVE SUMMARY: Traffic congestion, “site specific” school capacity, fire response and the Police sense of safety benchmarks have been the only ones that have been exceeded during the seven years of the City’s Quality of Life Benchmark Program. However, for the first time, the Longmont Power and Communications Customer Average Interruption Index (CAIDI) exceeded the benchmark during the 1st quarter of 2008. This is being regarded as an anomaly since there was one single large interruption that triggered the violation.

When the Fire Department began a new reporting system in 2005, the Fire and EMS benchmarks were being exceeded. The Council has acted responsibly over the years by enacting laws ensuring that new development is evaluated and may be prevented from exacerbating these issues. The Council also authorized funds to construct a new Fire Station at 11th and Terry, which will alleviate Fire’s response benchmark issue. With the passage of the school bonds, there were funds used to remedy the District’s capacity problems during the past few years for all schools having previously been identified as exceeding the benchmark. The District built Elementary #24 (Southwest Longmont – Clover Basin) and High School #5 (Weld County – Mead), and has the resources to properly operate and maintain the new facilities so the over capacity situation for those two areas is remedied. The City will continue to receive information from the District on all development applications and will determine whether they meet the school capacity benchmark on a case by case basis.

Finally, with the passage of the Public Safety Tax, resources are now available to enable both fire prevention and police services to improve and effectively deal with identified issues.

COUNCIL OPTIONS:

RECOMMENDED OPTIONS:

FISCAL IMPACT & FUND SOURCE FOR RECOMMENDED ACTION:



BACKGROUND AND ISSUE ANALYSIS:

Quality of Life Benchmark Report – 1st Quarter 2008

The City Council formally approved the Quality of Life Benchmarks for the City of Longmont in December of 2000. These benchmarks were thought to be essential in assisting the Council (and other decision makers) in monitoring the impacts that growth and development have on the community’s quality of life. The Council asked for quarterly reports to ensure that impacts are regularly evaluated and appropriate measures taken to avoid exceeding a benchmark or to begin serious discussions on what should be done if a benchmark is exceeded. The data collected since January 2001 allows some level of trend analysis for certain benchmarks that may indicate if growth impacts reveal patterns that should alert the City to future problems.

The charts attached to this communication indicate the current status of the Quality of Life Benchmarks. The benchmarks described below summarize “level 1 and 2” benchmarks.

Benchmarks-Level 1 & 2		Benchmark	Current Status
1	Fire & EMS Response Time	Respond in 4:59 90% of the time	Not being met – new fire station will mitigate
2	Congestion	Overall and/or movements with more than 5% of volume can’t exceed LOS D and volume/capacity ratio shouldn’t exceed 1	3 intersections exceed benchmark (KP Blvd/Hover, KP Blvd/Main, Nelson/Hover)
3	Clean Water	CDPS permit, State and Federal safe drinking water regulations	Being met
4	Water Supply	100 year drought	Being met
5	Clean Air	CO = 9 ppm 8 hour max; PM10 = 150 (ug/m3) 24 hrs; PM2.5 = 65 (ug/m3) 24 hours	Being met
6	Open Space	# of acres acquired	No new acres; 1814.5 acres in Fee; 1025 acres in conservation easements;
7	Affordable Housing	10% of the residential units constructed in new developments must be affordable	6 owner units added; 0 rental units added; 998 total
8	Parks & Rec.	2.5 acres/1000 population for neighborhood park; 4.5 acres/1000 population for community park; 1	Projected to be met at LPA build out

Benchmarks-Level 1 & 2		Benchmark	Current Status
		community rec center per 30,000 population	
9	Noise	<50 db after 10 pm	1081 complaints
10	Sewer/Water Infrastructure	Peak hour demands > 40 PSI	Being met
11	School Capacity	Flow depth to pipe diameter (d/D) ratio <1.0	Being met
12	Traffic Enforcement	Complaints are responded to within 3 days 90% of the time	Being met - 100% within 3 days
13	Sense of Safety (Police survey in July 2007)	No more than 5% believe that their personal level of safety is Very Unsafe or Unsafe; No more than 10% believe their property is Very Unsafe or Unsafe.	a) 6.6% feel unsafe personally – not being met; b) 12.4% feel that property is unsafe – not being met
14	Sense of Disorder (Police survey in July 2007)	85% of residents believe disorder related to crime is not major or moderate problem	83.5% - believe disorder is no problem or minor problem – not being met
15	Agricultural Preservation	# of acres eligible for TDR's	1994 acres preserved through TDR's; 869 acres purchased by Boulder County inside the LPA for Open Space; no new acres this quarter.
16	Electric Power	SAIFI not more than 1 event per customer per year; MAIFI not more than 1.5 events per customer per year; CAIDI no more than 80 minutes per customer per event.	CAIDI not being met; others being met

TRAFFIC CONGESTION – EXCEEDS BENCHMARK

The congestion benchmark states that all movements at a signalized intersection that carry 5% or more of the traffic at an intersection should be maintained at Level of Service D or better. In addition, the benchmark states that these movements should also have a volume to capacity ratio at or below 1.0. Table 1 shows these measures for the 1st quarter at the six intersections during the p.m. peak hour.

As in previous quarters, Ken Pratt/Hover and Nelson/Hover still had movements that exceeded the benchmark level of service. In addition, the intersection of Ken Pratt/Main is also exceeding the benchmark level of service.

With the opening of the Ken Pratt Boulevard extension in November 2003, significant changes were noted at the intersection of 3rd/Main. In 2004, there was an 8% reduction in traffic volumes entering the intersection during the p.m. peak hour and a 28% reduction in delays experienced by motorists compared to 2003 prior to the opening of KP Blvd extension. In 2005, the entering volume dropped an additional 3% compared to 2004 with delays also changing slightly. 2006 and 2007 volumes were comparable to 2005 with delays remaining well below pre-Ken Pratt extension levels.

To assist in interpreting the results of the analysis, the definitions of the various levels of service (LOS) are shown below. At signalized intersections, level of service reflects the average amount of delay experienced by drivers:

LOS A - on average, less than 10 seconds control delay per vehicle

LOS B - on average, 10 to 20 seconds control delay per vehicle

LOS C - on average, 20 to 35 seconds control delay per vehicle

LOS D - on average, 35 to 55 seconds control delay per vehicle (i.e., the benchmark)

LOS E - on average, 55 to 80 seconds control delay per vehicle

LOS F - on average, more than 80 seconds control delay per vehicle

In trying to put into perspective what it means when a movement at an intersection exceeds the benchmark limits, staff observed the Nelson/Hover intersection in more detail. Over the course of an average weekday peak hour, about 5,500 vehicles enter the Nelson/Hover intersection. In the 2nd quarter of 2007, during the p.m. peak hour, 790 vehicles experienced a level of service of E or F. That means that 790 out of 5,355 vehicles or about 15% of the vehicles entering the intersection during the peak hour are experiencing delays that exceed the benchmark standard.

Traffic Mitigation Efforts

Staff has identified the following physical and non-physical programs for the Council to consider in dealing with these intersections.

Physical mitigation options– KP Blvd/Hover, Hover/Nelson, Ken Pratt/Main

- 1) Airport Rd widening to four lanes from at State Highway 119 to 17th Ave. (CIP Project construction finished in 2006). Traffic volumes have been rising steadily on Airport Road since the widening project was completed in late 2006. As volumes continue to rise on Airport, it may free up capacity on Hover and allow signal timing changes that will allow for an improved level of service.
- 2) Hover Road widening from 4 lanes to 6 lanes. This project has been examined as part of the LACP update and the analysis indicates that it is not effective to pursue this project unless extended to Mountain View or 17th Ave.
- 3) Connect Dry Creek Rd from Nelson Rd to Rogers Rd. (Future CIP project or development project).
- 4) Add eastbound right turn lane, extend east bound left turn lanes, add second southbound left turn lane at Ken Pratt/Main to increase capacity. Staff is evaluating these alternatives to determine the benefit/cost of each to determine what if any improvements could be included in a future TSM intersection project.

- 5) Complete Martin Street between Ken Pratt and 3rd Avenue (future CIP) and Boston Avenue from Price Road to Martin Street (future CIP).

Non-physical mitigation options – KP Blvd/Hover, Hover/Nelson

- 1) Travel Demand Management (TDM) strategies including: changes in work hours to spread traffic demand over a larger time period, car pooling, van pooling, telecommuting, transit can be set up as either voluntary or mandatory for businesses. The Council reviewed a report in 2002 from a Citizens multi-modal transportation Task Force that recommended the creation of a Transportation Management Organization (TMO) that would be responsible for recommending TDM techniques that could be used by the private and public sectors. The City Council also approved \$3,400 to participate in a study to determine the feasibility of starting up a TMO along the Diagonal Corridor between Longmont and Boulder. The TMO Feasibility Study, completed in fall 2005, concluded that the Diagonal Corridor was not “ripe” for a TMO effort at this time. The study outlined the need for a dedicated funding source as well as a strong “champion” in the corridor to allow a TMO to develop in this area. Additionally, eight TDM policies are included as a component of the City’s Multi-Modal Transportation Plan (MMTP).
- 2) Accept congestion at these locations given the regional retail commercial nature and change the current benchmark to one that more realistically reflects the current situation or possibly remove the turning movement from the benchmark and use overall LOS D for the intersections. Staff is unaware of any notable regional commercial centers that operate at LOS D or better at peak hours. In August 2003, City Council reviewed a staff report regarding the mid term and long term operational analysis of South Hover Road. Staff prepared traffic impact information based on detailed existing and projected development for South Hover Road that translated into a projected LOS for the intersections from Ken Pratt Blvd to Nelson Road for both the short term and long term physical build out of the Longmont Planning Area. This analysis was done considering Hover Road as a 4 lane arterial. The conclusion reached by the City Council regarding future traffic impacts is that congestion would continue at these locations and it is not completely attributable to development in the mall area but is influenced by the regional nature of Hover Road. Therefore, the Council recognized that the development applications in the mall area, when considered individually, would not necessarily have a significant effect on the overall operation of Hover Road in the future. If the Council does not want to alter the benchmark, then the current land development code allows the staff/P/Z to approve “minor” traffic deviations and the Council to approve major deviations for new development on a case by case basis.

SCHOOL CAPACITY – MEETS BENCHMARK

The Council passed Ordinance O-2001-28 that requires the City to deny new subdivision applications that would cause an individual school to exceed 125% of its intended capacity unless the City is notified by the School District that adequate school facilities are or will be available based on inclusion in a funded 5-year capital improvement program. Because the School District’s 2002 bond passed, those attendance areas that exceeded (e.g. Mead) or were projected to exceed (e.g. Eaglecrest, Skyline,) the benchmark have a funding source that can be used to build new schools and would no longer exceed the benchmark if the construction occurs within a 5 year time frame. In 2004, two schools, Eaglecrest Elementary and Skyline High, were

projected to exceed the benchmark in 2007 and 2008 respectively, and in 2005, Eaglecrest reached 132%.

In 2005, because of the combination of reduced enrollment and bond financing, the School District Board determined that Skyline High School is no longer exceeding 125% of capacity and therefore is “unlikely to oppose approval of future subdivisions coming from the recent Elmore Annexation and others in this area of the City.” The District based its determination on the fact that the capacity of planned high school number five will most likely be constructed within the next five years. The District also acknowledges that it may need operating funds provided by a future mill levy. The Council and School Board discussed this issue at its January 24, 2005, joint meeting, and the Council agreed that while the District’s new capacity numbers are consistent with the approved methodology, there is still some concern that including “bonded” schools in the formula without having necessary operational and maintenance revenue could be misleading.

The City Council and the St. Vrain Valley School District met on January 30, 2006 to discuss the benchmark program and reviewed a new 5 year Capital Improvement Program chart that identified the schools currently exceeding the capacity benchmark and also reflected that the District had revenues necessary to build and operate the new Elementary School #24 and High School #5 in 2008 and 2009 respectively. The District Board also discussed other ideas that could assist in mitigating the capacity problem. Based on this information both groups believe that the District can properly notify the City that subdivisions feeding those schools satisfy the benchmark ordinance. The Council directed staff to prepare language clarifying the ambiguity in the Ordinance to avoid any future confusion regarding this matter but decided not to amend the ordinance and instead, agreed to form a Task Force with School District Board members to evaluate other ideas such as an Intergovernmental Agreement that could be used to more effectively implement a School Capacity Benchmark program. The Task Force met four times and reported to the City Council and School District Board recommending that a new Intergovernmental Agreement (IGA) be executed between the two entities revising the benchmark program to one that continues the 125% capacity benchmark in future school district planning and provides information to the City who will make final decisions on approving development applications.

The City Council approved the IGA in March and after a joint meeting with the School Board in April agreed to leave the IGA language as is regarding the possible use of the District’s Voluntary Capital Mitigation program being used as an acceptable programmatic change resulting in a positive referral letter from the District. The Council will evaluate all information from the District when reviewing development applications projected to exceed the 125% capacity benchmark and determine, on a case by case basis, whether the application should be approved.

School Capacity Benchmark Exemptions

There are currently about 665 single family and about 885 multi-family units that are “exempt” from the school benchmark ordinance because they were already in the City’s formal review process or previously approved. With the recent release of bonds for construction of Elementary #24 in southwest Longmont, the McStain “West Grange” project is now moving forward with development plans that include some building in 2008 when the implementing ordinance was approved.

FIRE/EMS BENCHMARK NOT BEING MET

Introduction

The Fire/EMS benchmark requires the Fire Department to respond to 90% of the calls for service within 4 minutes 59 seconds (4:59). This is a fractal¹ response time. The Department's previous record management system did not allow it to report response time data in the fractal method. The Department reported its response times as an average until the 3rd quarter of 2004. In 2004, the Department purchased a new records management system that permitted the use of fractal reporting. The Department has been submitting fractal response times since this date.

Analysis

The Fire Department has not met its benchmark response time criteria. It has never met the benchmark since these measurements were initiated in 2002. Emergency Medical Service (EMS) calls are closest to meeting the benchmark. This is because the response time of the ambulance providers, Pridemark Paramedic Services and subsequently AMR, are included in this analysis. The reason for including their data is that their personnel provide definitive patient care upon arrival. Pridemark or AMR are first on-scene approximately 50% of the time. Fire calls generally have a longer response time than EMS calls. The primary reason for this difference is that the responding personnel are required to don their protective turnout gear before initiating the response. This requirement adds time to the response.

In general, the fire department's response times, for both average and fractal measures, have been fairly consistent since 2002. The Department anticipates that response times will meet the benchmark with the addition of Station 6 in the central area of the city scheduled for construction in 2008

POLICE – SENSE OF SAFETY NOT BEING MET

The Longmont Police Department has received the final data from the 2007 Police Community Survey.

- 1) No more than 5 percent of Longmont residents believe that their personal level of safety is unsafe. In 2007, 6.6 percent of Longmont residents believed that their personal safety is unsafe.
- 2) No more than 10 percent of Longmont residents believe that their property is unsafe. In 2007, 12.5 percent of Longmont residents believed that their property is unsafe.

¹ fractal: A mathematical formula or algorithm that constitutes or defines an efficient way of formulating response times.

The sense of disorder benchmark states that at least 85 percent of Longmont residents define disorder as no problem or a minor problem. In 2007, 82.3 percent of Longmont residents defined disorder as no problem or a minor problem.

Over the next three years, the Police Department will receive additional resources from the public safety tax passed in November of 2007. The Police Department will be adding a total of 32 new positions in 2007, 2008, and 2009. We believe these resources will enhance the Police Department's capacity to more proactively respond to crime, traffic and disorder related issues in our community.

BENCHMARK AFFECT ON DEVELOPMENT APPLICATIONS

The Council also asked to be informed when proposed development projects are not being pursued; are on hold because of the belief that they could not meet a particular benchmark; or are in the development review process and will not likely meet a benchmark. The following are projects that staff believe fall into those categories.

Transportation congestion benchmark

Actual Applications –Past and Present

- Wal-Mart Super center annexation referral (Hover/Nelson) – not referred through the annexation process at Hover Rd location (2003)
- The McKinney property annexation referral (small parcel adjacent to Home Depot) was reviewed by Council in July 2005. Council decided not to refer the property through the review process. City Council has subsequently referred this property and the property north of the McKinney property for annexation processing. (see bullet #4)
- Ward Property annexation west of Super Target has been referred by Council and the application has been submitted for review. This property will require a traffic impact analysis as part of the subdivision and site plan applications to determine impacts on Hover and Nelson intersection.
- Fairgrounds Marketplace (parcels north of Home Depot). Council has referred this property of approximately 26 acres into the annexation and land use amendment review process for commercial land use and zoning. A traffic impact analysis has been submitted as part of the annexation and land use amendment applications to determine impacts on the Hover and Nelson and other intersections.

Applications Reviewed with No Significant Impact on Benchmark

- Bank One at St. Vrain Center (Hover/Nelson)—excepted through the minor impact provision of the code (2004)

- St. Vrain Centre, Parcel G. Land use amendment and rezoning on this parcel for a mixed-use development – finding of no significant increase in traffic impact from prior St Vrain Centre transportation study. (2004)
- Discount Tire and Heritage/Wells Fargo Bank. City Council approved this application finding that the original Home Depot annexation traffic study accounted for the trips from this development and that the additional traffic impact at Nelson and Hover would be insignificant. The Heritage Bank was not built, but Wells Fargo was constructed at this location, meeting the parameters of the Council approval regarding no significant additional traffic impact. (2004)
- Front Range Community College. A traffic study was prepared to determine if it will meet the benchmark at Hover/KP Blvd. The limited use for this project was approved with a finding that the FRCC traffic impact would be minimal and insignificant on the Ken Pratt Blvd & Hwy 119 intersection. (2004)
- The Silo Restaurant (Old Village Gardener building) on S. Hover Road. A conditional use was approved by the P/Z with a finding of minimal and insignificant traffic impact on the Ken Pratt Blvd and Hwy 119 intersection. (2003)
- Outback Steakhouse Restaurant, Noki Restaurant, the Gateway Centre and Primrose School (daycare) on Lot 12 of the Boulder County Business Center (Clover Basin Drive and Dry Creek Drive) were approved as Limited Use Site Plan applications. In addition, the Holiday Inn Express conditional use site plan was also approved for Lot 12. These projects' traffic studies were compared to the original traffic study for Lot 12 and it was determined that the traffic from these projects was not significantly more than the traffic predicted from this lot as a part of the original subdivision approval. (2004, 2005 and 2006)
- Eye Care Center of Northern Colorado at Boulder County Business Center Lot 4 (finding similar to Outback). (2004)
- Spring Hill Suites (Marriott) south of the existing Marriott on Lots 4 & 5 of the Boulder County Business Center has been approved for a conditional use site plan. It was determined that the traffic from the hotel is not significantly more than the traffic predicted from these lots as part of the original subdivision approval. (2005)
- Redevelopment of the Target site for a Super Target store. A transportation impact study has been approved which was determined to add minor “net” additional traffic and therefore does not trigger the benchmark. (2005)
- American Honda Data Center at Longmont Business Center Lot 11. Was determined to have minimal impact due to low number of employees (2007).
- Panda Plaza at the Super Target site (Hover and Nelson). Traffic generation was included as part of overall Super Target traffic analysis (2007).

Potential applications (i.e. staff has had discussions with potential applicants regarding development of these properties)

- Indoor private recreation facility at Boulder County Business Center. Will need to submit a transportation impact study for staff to analyze benchmark impact.

- Fordham Village residential project south of Rogers Road and west of Hover Road. Will need to submit a transportation impact study for staff to analyze benchmark impact.
- Brewer property south of Silo Restaurant site redevelopment (near Hover and Pike). Office and other commercial uses are being considered. Will need to submit a transportation impact study for staff to analyze benchmark impact.
- Silo property redevelopment at Hover and Hwy 119. Will need to submit a transportation impact study for staff to analyze benchmark impact

LONGMONT POWER & COMMUNICATIONS – CAIDI NOT BEING MET

CAIDI exceeded the established benchmark for the first quarter in 2008. CAIDI, the Customer Average Interruption Duration Index, is the average time it took to restore electrical service as a result of outages that occurred within a measured time frame (first quarter 2008 in this instance). A single large event can significantly affect this metric, especially if the number of outages is low during the time frame. This is exactly what happened this first quarter of 2008. The number of outages that occurred was low as evident by the very low SAIFI (System Average Interruption Frequency Index of .17) and we experienced a large outage in January when a cable failed just outside of a substation affecting an entire feeder for a significant time period. LPC identified a procedural problem with an after hours call center contractor that contributed to the duration of this outage and has worked to correct the issue.

As we have made improvements in our electrical distribution system resulting in a significant decrease in the number of outages, the volatility of this particular metric (CAIDI) is becoming more apparent. At a future date when Council considers updating the benchmarks, LPC may recommend substituting CAIDI with a different industry standard metric called SAIDI (System Average Interruption Duration Index). This particular metric is more indicative of overall system performance and less sensitive to infrequent system events.

ATTACHMENTS:

- 1. Table 1 – Traffic Data by Intersection**
- 2. Benchmark Chart**
- 3. Graphs 1-13**

Table 1 – P.M. Peak Hour Level of Service and v/c Ratio for Selected Intersections in Longmont 1st quarter 2008

	Northbound			Southbound			Eastbound			Westbound			Total Hourly Volume and Overall LOS
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3rd/Main													
Volume	75	1070	170	140	710	115	130	415	85	195	500	135	3,740
% of Entering Volume*	2%	29%	4%	4%	19%	3%	3%	11%	2%	5%	13%	4%	
LOS	n/a	B	n/a	n/a	A	n/a	n/a	C	n/a	C	C	n/a	C
V/c ratio	n/a	0.8	n/a	n/a	0.5	n/a	n/a	0.5	n/a	0.7	0.5	n/a	
17th/Main													
Volume	220	1445	190	195	910	105	195	550	165	130	405	245	4,755
% of Entering Volume	4%	30%	4%	4%	19%	2%	4%	12%	3%	3%	9%	5%	
LOS	n/a	D	n/a	n/a	C	n/a	n/a	D	n/a	n/a	D	C	D
V/c ratio	n/a	1.0	n/a	n/a	0.5	n/a	n/a	0.8	n/a	n/a	0.6	0.4	
Ken Pratt/Hover													
Volume													
% of Entering Volume	3%	19%	3%	6%	18%	n/a	18%	21%	n/a	3%	10%	n/a	
LOS	n/a	D	n/a	F	D	n/a	D	E	n/a	n/a	F	n/a	E
V/c ratio	n/a	1.0	n/a	1.3	1.0	n/a	1.0	1.0	n/a	n/a	1.0	n/a	
Nelson/Hover													
Volume													
% of Entering Volume	3%	32%	2%	4%	19%	4%	9%	11%	3%	3%	6%	4%	
LOS	n/a	C	n/a	n/a	B	n/a	F	D	n/a	n/a	D	n/a	D
V/c ratio	n/a	0.9	n/a	n/a	0.6	n/a	1.0	0.8	n/a	n/a	0.7	n/a	
17th/Hover													
Volume	160	1415	365	95	610	145	360	495	90	240	370	165	4,510
% of Entering Volume	4%	31%	8%	2%	14%	3%	8%	11%	2%	5%	8%	4%	
LOS	n/a	C	A	n/a	C	n/a	D	D	n/a	D	D	n/a	C
V/c ratio	n/a	0.9	0.4	n/a	0.4	n/a	0.8	0.7	n/a	0.5	0.5	n/a	
Ken Pratt/Main													
Volume	250	915	475	230	795	290	400	1240	160	215	640	210	5,820
% of Entering Volume	4%	16%	8%	4%	14%	4%	7%	21%	3%	4%	11%	4%	
LOS	n/a	D	B	n/a	D	n/a	D	E	n/a	n/a	E	n/a	D
V/c ratio	n/a	0.9	0.6	n/a	0.8	n/a	0.5	1.0	n/a	n/a	0.9	n/a	

* Percentages may not equal 100% due to rounding

Note: Columns marked n/a are below the 5% entering volume threshold so no LOS or v/c data is shown for those movements