

ORANGE COUNTY, NC SCHOOLS ADEQUATE PUBLIC FACILITIES ORDINANCE

**PREPARED BY A STAFF COMMITTEE: PLANNING DIRECTORS,
SCHOOL REPRESENTATIVES, TECHNICAL ADVISORY COMMITTEE
(SAPFOTAC)**

**(PURSUANT TO PROVISIONS OF A MEMORANDUM OF
UNDERSTANDING ADOPTED IN 2002 & 2003)
(ORDINANCES ADOPTED IN JULY 2003)**

Annual Report 2014

(BASED ON NOVEMBER 2013 DATA)

CERTIFIED BY THE BOCC ON MAY X, 2014

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2014 SAPFOTAC Executive Summary

I. Base Memorandum of Understanding

A. Level of Service.....(No Change).....Pg. 1

	<i>Chapel Hill/Carrboro School District</i>	<i>Orange County School District</i>
<i>Elementary</i>	105%	105%
<i>Middle</i>	107%	107%
<i>High</i>	110%	110%

B. Building Capacity and Membership.....(Change).....Pg. 2

	<i>Chapel Hill/Carrboro School District</i>			<i>Orange County School District</i>		
	Capacity	Membership	Increase from Prior Year	Capacity	Membership	Increase from Prior Year
<i>Elementary</i>	5829	5554	11	3694	3433	30
<i>Middle</i>	2840	2858	73	2166	1747	63
<i>High</i>	3875	3764	(32)	2439	2421	106

C. Membership Date – November 15.....(No Change).....Pg.17

II. Annual Update to SAPFO System

A. Capital Investment Plan (CIP).....(No Change).....Pg. 18

B. Student Membership Projection Methodology.....(No Change).....Pg. 19

The average of 3, 5, and 10 year history/cohort survival, linear and arithmetic projection models.

C. Student Membership Projections(Change).....Pg. 29

Analysis of 5 Years of Projections for 2013-14 School Year – Chapel Hill Carrboro City Schools

(The number in brackets [n] is the number of students the projection was off compared to actual membership. A number in parenthesis within the brackets [(n)] indicates the projection was low compared to the actual whereas a number not in parenthesis indicates the projection was high compared to the actual.)

		Year Projection Made for 2013-14 Membership				
	Actual 2013 Membership	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Elementary	5554	5703 [160]	5604 [61]	5489 [(54)]	5572 [29]	5612 [58]
Middle	2858	2960 [177]	2848 [65]	2795 [12]	2796 [13]	2862 [4]
High	3764	3930 [134]	3792 [(4)]	3733 [(63)]	3783 [(13)]	3828 [64]

Analysis of 5 Years of Projections for 2013-14 School Year – Orange County Schools

(The number in brackets [n] is the number of students the projection was off compared to actual membership. A number in parenthesis within the brackets [(n)] indicates the projection was low compared to the actual whereas a number not in parenthesis indicates the projection was high compared to the actual.)

		Year Projection Made for 2013-14 Membership				
	Actual 2013 Membership	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Elementary	3433	3337 [(166)]	3355 [(48)]	3435 [32]	3438 [35]	3433 [0]
Middle	1747	1708 [24]	1751 [67]	1732 [48]	1716 [32]	1733 [(14)]
High	2421	2254 [(61)]	2298 [(17)]	2258 [(57)]	2278 [(37)]	2355[(66)]

D. Student Growth Rate(Change).....Pg. 39

Projected Average Annual Growth Rate over Next 10 Years										
Year Projection Made:	Chapel Hill/Carrboro School District					Orange County School District				
	2009-10	2010-11	2011-12	2012-13	2013-14	2009-10	2010-11	2011-12	2012-13	2013-14
Elementary	1.72%	1.44%	1.59%	1.18%	1.44%	1.34%	1.57%	1.6%	1.31%	1.30%
Middle	1.93%	1.67%	1.94%	1.59%	1.58%	1.53%	1.84%	2.01%	1.64%	1.42%
High	1.8%	1.57%	1.73%	1.60%	1.27%	1.38%	1.59%	1.61%	1.43%	1.35%

E. Student / Housing Generation Rate(No Change).....Pg. 42

SCHOOL ADEQUATE PUBLIC FACILITIES ORDINANCE STATUS

(based on future year Student Membership Projections)

CHAPEL HILL/CARRBORO SCHOOL DISTRICT

Elementary School Level

- Does not currently exceed 105% LOS standard (current LOS is 95.3%).
- The projected growth rate at this level is expected to decrease over the next 10 years but remain positive (average ~1.4% per year compared to 2.0% over the past 10 years).
- Capacity has increased by 585 students due to the opening of Northside Elementary School. Projections show that Chapel Hill/Carrboro Elementary School #12 will be needed in 2020-21. This is one year earlier than last year's projections.

Middle School Level

- Does not currently exceed 107% LOS standard (current LOS is 100.6%).
- The projected growth rate at this level is expected to increase at a greater rate over the next 10 years than it has in the previous 10 years (average ~1.6% compared to an average of 0.67% over the past 10 years).
- The planned addition to Culbreth Middle School for the 2014-15 school year is proposed to increase capacity with the addition of 104 seats. As a result, projections show that Chapel Hill/Carrboro Middle School #5 is projected to be needed in 2020-21. This is three years later than last year's projections

High School Level

- A. Does not currently exceed the 110% LOS standard (current LOS is 97.1%).
- B. The projected growth rate at this level is expected to decrease, but remain positive over the next 10 years (average ~1.3% compared to 1.86% over the past 10 years).
- C. Expansion of Carrboro High School from the initial capacity of 800 students to the ultimate capacity of 1,200 students is projected to be needed in 2023-24. This is three years later than last year's projections which showed a need in 2020-21.

ORANGE COUNTY SCHOOL DISTRICT

Elementary School Level

- A. Does not currently exceed 105% LOS standard (current LOS is 92.9%).
- B. The projected growth rate at this level is expected decrease but remain positive over the next 10 years (average ~1.3% compared to 1.6% over the past 10 years).
- C. Orange County Elementary School # 8 is projected to be needed in 2023-24. This is a change from last year's projections which did not show a need for a new Elementary School in the 10 year projection period.

Middle School Level

- A. Does not currently exceed 107% LOS standard (current LOS is 80.7%).
- B. The projected growth rate at this level is expected to increase at a greater rate over the next 10 years (average ~1.4% compared to 0.35% over the past 10 years).
- C. Projections are not showing a need for an additional Middle School in the 10 year projection period. Staff continues to monitor new development activity in the Orange County portion of Mebane, which is not a party to the Schools APFO MOU at this time.

High School Level

- A. Does not currently exceed 110% LOS standard (current LOS is 99.3%).
- B. The projected growth rate at this level is expected to decrease but remain positive over the next 10 years (average ~1.4% compared to 2.4% over the past 10 years).
- C. Expansion of Cedar Ridge High School from the initial capacity of 500 students to the 1,500 students is projected to be needed in 2022-23. This is a change from last year's projections which did not show a need for additional capacity in the 10-year projection period.

Changes in CAPS (Certificate of Adequate Public Schools) System

As a result of a North Carolina Supreme Court ruling in August 2012, the local governments that are party to the SAPFO considered modification of their development regulations as they pertain to CAPS in 2013. However, at this time the local governments have not pursued revisions to existing standards contained within the CAPS system or SAPFO MOUs.

Orange County, NC School Adequate Public Facilities Ordinance

INTRODUCTION

The Schools Adequate Public Facilities Ordinance and its Memorandum of Understanding are ordinances and agreements, respectively. Supporting documents are anticipated to be dynamic to incorporate the annual changing conditions of membership, capacity and student projections that may affect School Capital Investment Plan (CIP) timing. This formal annual report will be forthcoming to all of the Schools Adequate Public Facilities Ordinance partners each year as new information is available.

This updated information is used in the schools capital needs process of the Capital Investment Plan (Process 1) and within elements of the Schools Adequate Public Facilities Ordinance Certificate of Adequate Public Schools (CAPS) spreadsheet system (Process 2).

This report and any comments from the Schools Adequate Public Facilities Ordinance partners will be considered in the first half of each year by the Board of County Commissioners at a regular or special meeting. The various elements of the report are then “certified” and formally considered in the process of the upcoming Capital Investment Plan. The Certificate of Adequate Public Schools system is updated after November 15 when data is received from the school districts with actual membership and pre-certified capacity (i.e. CIP capacity or prior “joint action” capacity changes).

The Schools Adequate Public Facilities Ordinance and Memorandum of Understanding have dynamic aspects. The derivation of the baseline and update to the variables will continue in the future as a variety of school related issues are fine-tuned by technical and policy groups.

The primary facet of this report includes the creation of mathematical projections for student memberships by school levels (Elementary, Middle and High) and by School Districts (Chapel Hill/Carrboro and Orange County). This information is found in Section II, Subsections B, C, D, and E.

In summary, this report serves as an update to the dynamic conditions of student membership and school capacity which affect future projected needs considered in Capital Investment Planning.

Interested parties may make their comments known to the Board of County Commissioners prior to their review of the report and school CIP completion or ask questions of the SAPFOTAC members.

ANNUAL REPORT AS OUTLINED IN
Schools Adequate Public Facilities Ordinance Memorandum
of Understanding (Schools APFO MOU)
SECTION 1d

RESPECTFULLY SUBMITTED
TO SCHOOLS ADEQUATE PUBLIC FACILITIES
ORDINANCE PARTNERS

Chapel Hill/Carrboro School District School APFO	Orange County School District School APFO
Board of County Commissioners	Board of County Commissioners
Carrboro Board of Aldermen	Hillsborough Town Council
Chapel Hill Town Council	
Chapel Hill/Carrboro School Board	Orange County School Board

Planning Directors/School Representatives
Technical Advisory Committee
 (aka SAPFOTAC)

Town of Carrboro
 Trish McGuire, Planning Director
 301 West Main Street
 Carrboro, NC 27510

Town of Chapel Hill
 J.B. Culpepper, Planning Director
 405 Martin Luther King, Jr. Blvd.
 Chapel Hill, North Carolina 27514

Town of Hillsborough
 Margaret Hauth, Planning Director
 P.O. Box 429
 Hillsborough, NC 27278

Orange County Planning Department
 Craig Benedict, Planning Director and
 Ashley Moncado, Special Projects Planner and
 Paul Laughton, Deputy Director of Finance and Administrative Services
 131 W. Margaret Lane
 P.O. Box 8181
 Hillsborough, NC 27278

Orange County School District
 Gerri Martin, Superintendent
 200 E. King Street
 Hillsborough, NC 27278

Chapel Hill-Carrboro School District
 Todd LoFrese, Assistant Superintendent for Support Services and
 Catherine Mau, Coordinator of Student Enrollment
 750 Merritt Mill Road
 Chapel Hill, NC 27516

I. BASE MEMORANDUM OF UNDERSTANDING

A. Level of Service

1. ***Responsible Entity for Suggesting Change*** – Change can only be effectuated by amendment to Memorandum of Understanding (MOU) by all School APFO partners.
2. ***Definition*** – Level of Service (LOS) means the amount (level) of students that can be accommodated (serviced) at a certain school system grade group
[i.e., Elementary level (K-5), Middle Level (6-8), High School Level (9-12)].

<i>Standard for:</i>			<i>Standard for:</i>		
Chapel Hill Carrboro School District			Orange County School District		
Elementary	Middle	High School	Elementary	Middle	High School
105%	107%	110%	105%	107%	110%

- | | |
|---|---|
| <ol style="list-style-type: none"> 4. <i>Analysis of Existing Conditions</i>
Chapel Hill Carrboro School District
These standards are acceptable at this time. | <ol style="list-style-type: none"> <i>Analysis of Existing Conditions</i>
Orange County School District
These standards are acceptable at this time. |
|---|---|

- | | |
|---|--|
| <ol style="list-style-type: none"> 5. <i>Recommendation</i> –
No change from above standard | <ol style="list-style-type: none"> <i>Recommendation</i> –
No change from above standard |
|---|--|

B. Building Capacity

1. ***Responsible Entity for Suggesting Change*** – The Planning Directors, School Representatives, and Technical Advisory Committee (SAPFOTAC) will receive requested changes that are CIP related and adopted in the prior year. CIP capacity changes will be updated along with actual membership received in November of each year.

Other changes will be sent to a ‘Joint Action Committee’ of the BOCC and Board of Education, as noted in the MOU, who will make recommendations and forward changes (on the specific forms with justification) to the full Board of County Commissioners for review and action. These non-CIP changes would be updated in the upcoming November CAPS system recalibration and included in the SAPFOTAC report.
2. ***Definition*** – “For purposes of this Memorandum, "building capacity" will be determined by reference to State guidelines and the School District guidelines (consistent with CIP School Construction Guidelines/policies developed by the School District and the Board of County Commissioners) and will be determined by a joint action of the School Board and the Orange County Board of Commissioners. As used herein the term "building capacity" refers to permanent buildings. Mobile classrooms and other temporary student accommodating classroom spaces are not permanent buildings and may not be counted in determining the school districts building capacity.”
3. ***Standard for:***

<p>Chapel Hill Carrboro School District</p> <p>The original certified capacity for each of the schools was certified by the respective superintendent and incorporated in the initialization of the CAPS system (Chapel Hill Carrboro School District April 29, 2002 - Base)</p> <p>Capacity changes were made each year as follows:</p> <p>2003: Increase of 619 at Rashkis Elementary.</p> <p>2004: No changes at Elementary, Middle, or High School levels.</p>	<p>Standard for:</p> <p>Orange County School District</p> <p>The original certified capacity for each of the schools was certified by the respective superintendent and incorporated in the initialization of the CAPS system (Orange County School District April 30, 2002 - Base)</p> <p>Capacity changes were made each year as follows:</p> <p>2003: No net increase in capacity at Elementary level. No changes at Middle</p>
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2005: No changes at Elementary, Middle, or High School levels.

2006: No changes at Elementary, Middle, or High School levels.

2007: An increase of 800 at the High School level with the opening of Carrboro High School.

2008: An increase of 323 at the Elementary School level due to the opening of Morris Grove Elementary School and the implementation of the 1:21 class size ratio in grades K-3

2009: No changes at Elementary, Middle, or High School levels.

2010: An increase in capacity of 40 students at the High School level with Phoenix Academy High School becoming official high school within the district

2011: No changes at Elementary, Middle, or High School levels.

2012: No changes at Elementary, Middle, or High School levels.

2013: An increase in capacity of 585 students due to the opening of Northside Elementary School.

School level. Increase of 1,000 at Cedar Ridge High School.

2004: No net increase in capacity at Elementary level. No changes at Middle or High School levels.

2005: An increase in capacity of 100 at Hillsborough Elementary with the completion of renovations.

2006: An increase in capacity of 700 at the Middle School level with the completion of Gravelly Hill Middle School and an increase of 15 at the High School level with the temporary location of Partnership Academy Alternative School. An increase of 2 at the Elementary level due to a change in the capacity calculation for each grade at each school.

2007: No changes at Elementary, Middle, or High School levels.

2008: A decrease of 228 at the Elementary School level due to the implementation of the 1:21 class size ratio in grades K-3 and an increase of 25 at the High School level with the completion of the new Partnership Academy Alternative School.

2009: No changes at Elementary, Middle, or High School levels.

2010: No changes at Elementary, Middle, or High School levels.

2011: No changes at Elementary, Middle, or High School levels.

2012: No changes at Elementary or Middle

Section I

School levels. A decrease of 119 at High School level as a result of a N.C. Department of Public Instruction (DPI) study.

2013: No changes at Elementary, Middle, or High School levels.

4. *Analysis of Existing Conditions*

Chapel Hill Carrboro School District

The Schools Facilities Task Force developed a system to calculate capacity. Any changes year to year will be monitored, reviewed, and recorded by the SAPFOTAC on approved forms distributed to SAPFO partners and certified upon approval by the Board of County Commissioners each year.

The requested 2013-14 capacity is noted on
Attachment I.B.4

5. *Recommendation –*

Accept school capacities at all levels, as reported by CHCCS and shown in Attachment I.B.4.

Analysis of Existing Conditions

Orange County School District

The Schools Facilities Task Force developed a system to calculate capacity. Any changes year to year will be monitored, reviewed, and recorded by the SAPFOTAC on approved forms distributed to SAPFO partners and certified upon approval by the Board of County Commissioners each year.

The requested 2013-14 capacity is noted on
Attachment I.B.3

Recommendation –

Accept school capacities at all levels, as reported by OCS and shown in Attachment I.B.3.

Section I

Attachment I.B.1
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2012-13

School APFO Capacity, Membership and Change Request Form

School District: Orange County Schools

SAPFO CAPS Year: November 15, 2012 - November 14, 2013

Capacity and Membership Submittal Date: November 15, 2012

Elementary School	Square Feet	2008-2009 Requested Capacity	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	Justification Footnote #	Membership
Cameron Park	70,812	565	565	565	565	565		658
Central	52,492	455	455	455	455	455		319
Efland Cheeks	64,316	497	497	497	497	497		455
Grady Brown	74,016	544	544	544	544	544		455
Hillsborough	51,106	471	471	471	471	471		443
New Hope	100,164	586	586	586	586	586		624
Pathways	85,282	576	576	576	576	576		449
Total	498,188	3,694	3,694	3,694	3,694	3,694		3,403

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

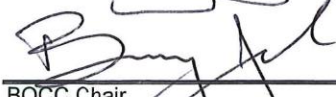
Capacity Certification:

 11-20-12
Superintendent Date

Membership Certification:

 11-20-12
Superintendent Date

 12/4/12
BOCC Chair Date

 12/4/12
BOCC Chair Date

Section I

Attachment I.B.1
(page 2 of 3)
2012-13

School APFO Capacity, Membership and Change Request Form

School District: Orange County Schools

SAPFO CAPS Year: November 15, 2012 - November 14, 2013

Capacity and Membership Submittal Date: November 15, 2012

Middle School	Square Feet	2008-2009 Requested Capacity	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	Justification Footnote #	Membership
A.L. Stanback	136,000	740	740	740	740	740		603
C.W. Stanford	107,620	726	726	726	726	726		615
Gravelly Hill	123,000	700	700	700	700	700		466
Total	366,620	2,166	2,166	2,166	2,166	2,166		1,684

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:

D. Patrick Rhodes 11-20-12
Superintendent Date

Membership Certification:

D. Patrick Rhodes 11-20-12
Superintendent Date

[Signature] 12/4/12
BOCC Chair Date

[Signature] 12/4/12
BOCC Chair Date

Section I

Attachment I.B.1
(page 3 of 3)
2012-13

School APFO Capacity, Membership and Change Request Form

School District: Orange County Schools

SAPFO CAPS Year: November 15, 2012 - November 14, 2013

Capacity and Membership Submittal Date: November 15, 2012

High School	Square Feet	2008-2009 Requested Capacity	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	Justification Footnote #	Membership
Orange	213,509	1,518	1,518	1,518	1,518	1,399	1	1,214
Cedar Ridge	206,900	1,000	1,000	1,000	1,000	1,000		1,077
Partnership	6,600	40	40	40	40	40		24
Total	427,009	2,558	2,558	2,558	2,558	2,439		2,315

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

1. The new capacity requested for Orange High School (1,399) is based on a capacity analysis and facilities study completed by the Department of Public Instruction in August 2012.

Capacity Certification:

D. Patrick Rhodes 11-20-12
Superintendent Date

[Signature] 12/4/12
BOCC Chair Date

Membership Certification:

D. Patrick Rhodes 11-20-12
Superintendent Date

[Signature] 12/4/12
BOCC Chair Date

School APFO Capacity, Membership and Change Request Form

School District: Chapel Hill-Carrboro City Schools

SAPFO CAPS Year: November 15, 2012 - November 14, 2013

Capacity and Membership Submittal Date: November 15, 2012

Elementary School	Square Feet	2008-2009 Requested Capacity	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	Justification Footnote #	Membership (referenced school year)
Carrboro	60,832	533	533	533	533	533		579
Ephesus	66,952	448	448	448	448	448		491
Estes Hills	56,299	527	527	527	527	527		562
Glenwood	50,764	423	423	423	423	423		509
FP Graham	66,689	538	538	538	538	538		512
McDougle	98,000	564	564	564	564	564		523
Rashkis	95,729	585	585	585	585	585		505
Scroggs	90,980	575	575	575	575	575		600
Seawell	52,896	466	466	466	466	466		706
Morris Grove	90,221	585	585	585	585	585		556
Total	729,362	5,244	5,244	5,244	5,244	5,244		5,543

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:


Capacity Certification:

 11/20/12
Superintendent Date

 12/4/12
BOCC Chair Date

Membership Certification:

 11/20/12
Superintendent Date

 12/4/12
BOCC Chair Date

School APFO Capacity, Membership and Change Request Form

School District: Chapel Hill-Carrboro City Schools

SAPFO CAPS Year: November 15, 2012 - November 14, 2013

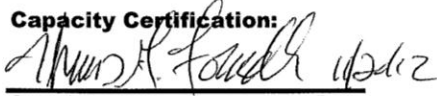
Capacity and Membership Submittal Date: November 15, 2012

Middle School	Square Feet	2008-2009 Requested Capacity	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	Justification Footnote #	Membership (referenced school year)
Culbreth	108,058	670	670	670	670	670		688
McDougle	136,221	732	732	732	732	732		700
Phillips	109,498	706	706	706	706	706		641
Smith	128,764	732	732	732	732	732		756
Total	482,541	2,840	2,840	2,840	2,840	2,840		2,785

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:


Capacity Certification:


Superintendent Date


BOCC Chair Date 12/4/12

Membership Certification:


Superintendent Date


BOCC Chair Date 12/4/12

School APFO Capacity, Membership and Change Request Form

School District: Chapel Hill-Carrboro City Schools

SAPFO CAPS Year: November 15, 2012 - November 14, 2013


Capacity and Membership Submittal Date: November 15, 2012

High School	Square Feet	2008-2009 Requested Capacity	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	Justification Footnote #	Membership (referenced school year)
Chapel Hill	241,111	1,520	1,520	1,520	1,520	1,520		1,374
East Chapel Hill	259,869	1,515	1,515	1,515	1,515	1,515		1,474
Carrboro	148,023	800	800	800	800	800		918
Phoenix Acad.	5,207	0	0	40	40	40		30
Total	654,210	3,835	3,835	3,875	3,875	3,875		3,796

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:


Superintendent Date 11/24/12


BOCC Chair Date 12/4/12

Membership Certification:


Superintendent Date 11/24/12


BOCC Chair Date 12/4/12

Section I

Attachment I.B.3
(page 1 of 3)
2013-14

School APFO Capacity, Membership and Change Request Form

School District: Orange County Schools

SAPFO CAPS Year: November 15, 2013 - November 14, 2014

Capacity and Membership Submittal Date: November 15, 2013

Elementary School	Square Feet	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	2013-2014 Requested Capacity	Justification Footnote #	Membership
Cameron Park	70,812	565	565	565	565	565		658
Central	52,492	455	455	455	455	455		354
Efland Cheeks	64,316	497	497	497	497	497		459
Grady Brown	74,016	544	544	544	544	544		456
Hillsborough	51,106	471	471	471	471	471		453
New Hope	100,164	586	586	586	586	586		636
Pathways	85,282	576	576	576	576	576		417
Total	498,188	3,694	3,694	3,694	3,694	3,694		3,433

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:

 11/20/13
Superintendent Date

 12-3-13
BOCC Chair Date

Membership Certification:

 11/20/13
Superintendent Date

 12-3-13
BOCC Chair Date

Section I

Attachment I.B.3
(page 2 of 3)
2013-14

School APFO Capacity, Membership and Change Request Form

School District: Orange County Schools

SAPFO CAPS Year: November 15, 2013 - November 14, 2014

Capacity and Membership Submittal Date: November 15, 2013

Middle School	Square Feet	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	2013-2014 Requested Capacity	Justification Footnote #	Membership
A.L. Stanback	136,000	740	740	740	740	740		632
C.W. Stanford	107,620	726	726	726	726	726		639
Gravelly Hill	123,000	700	700	700	700	700		476
Total	366,620	2,166	2,166	2,166	2,166	2,166		1,747

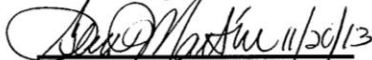
Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:


Superintendent Date 11/20/13

Membership Certification:


Superintendent Date 11/20/13


BOCC Chair Date 12-3-13


BOCC Chair Date 12-3-13

Section I

Attachment I.B.3
(page 3 of 3)
2013-14

School APFO Capacity, Membership and Change Request Form

School District: Orange County Schools

SAPFO CAPS Year: November 15, 2013 - November 14, 2014

Capacity and Membership Submittal Date: November 15, 2013

High School	Square Feet	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	2013-2014 Requested Capacity	Justification Footnote #	Membership
Orange	213,509	1,518	1,518	1,518	1,399	1,399		1,270
Cedar Ridge	206,900	1,000	1,000	1,000	1,000	1,000		1,130
Partnership	6,600	40	40	40	40	40		21
Total	427,009	2,558	2,558	2,558	2,439	2,439		2,421

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC. 2. The 2012-2013 capacity numbers for Orange High School (1,399) is based on a capacity analysis and facilities study completed by the Department of Public Instruction in August 2012.

Justification:

Capacity Certification:


Superintendent Date 11/20/13

Membership Certification:


Superintendent Date 11/20/13


BOCC Chair Date 12-3-13


BOCC Chair Date 12-3-13

Section I

Attachment I.B.4
(page 1 of 3)
2013-14

School APFO Capacity, Membership and Change Request Form

School District: Chapel Hill-Carrboro City Schools

SAPFO CAPS Year: November 15, 2013 - November 14, 2014

Capacity and Membership Submittal Date: November 15, 2013

Elementary School	Square Feet	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	2013-2014 Requested Capacity	Justification Footnote #	Membership (referenced school year)
Carrboro	60,832	533	533	533	533	533		461
Ephesus	66,952	448	448	448	448	448		436
Estes Hills	56,299	527	527	527	527	527		500
Glenwood	50,764	423	423	423	423	423		522
FP Graham	66,689	538	538	538	538	538		484
McDougle	98,000	564	564	564	564	564		497
Rashkis	95,729	585	585	585	585	585		522
Scroggs	90,980	575	575	575	575	575		552
Seawell	52,896	466	466	466	466	466		539
Morris Grove	90,221	585	585	585	585	585		548
Northside	99,500	0	0	0	0	585		493
Total	828,862	5,244	5,244	5,244	5,244	5,829		5,554

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:

 11/26/13
Superintendent Date

Membership Certification:

 11/26/13
Superintendent Date

 12-3-13
BOCC Chair Date

 12-3-13
BOCC Chair Date

Section I

Attachment I.B.4
(page 2 of 3)
2013-14

School APFO Capacity, Membership and Change Request Form

School District: Chapel Hill-Carrboro City Schools

SAPFO CAPS Year: November 15, 2013 - November 14, 2014

Capacity and Membership Submittal Date: November 15, 2013

Middle School	Square Feet	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	2013-2014 Requested Capacity	Justification Footnote #	Membership (referenced school year)
Culbreth	108,058	670	670	670	670	670		699
McDougle	136,221	732	732	732	732	732		705
Phillips	109,498	706	706	706	706	706		658
Smith	128,764	732	732	732	732	732		796
Total	482,541	2,840	2,840	2,840	2,840	2,840		2,858

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:


Superintendent Date

Membership Certification:


Superintendent Date


BOCC Chair Date 12-3-13


BOCC Chair Date 12-3-13

Section I

Attachment I.B.4
(page 3 of 3)
2013-14

School APFO Capacity, Membership and Change Request Form

School District: Chapel Hill-Carrboro City Schools

SAPFO CAPS Year: November 15, 2013 - November 14, 2014

Capacity and Membership Submittal Date: November 15, 2013

High School	Square Feet	2009-2010 Requested Capacity	2010-2011 Requested Capacity	2011-2012 Requested Capacity	2012-2013 Requested Capacity	2013-2014 Requested Capacity	Justification Footnote #	Membership (referenced school year)
Chapel Hill	241,111	1,520	1,520	1,520	1,520	1,520		1,423
East Chapel Hill	259,869	1,515	1,515	1,515	1,515	1,515		1,413
Carrboro	148,023	800	800	800	800	800		898
Phoenix Acad.	5,207	0	40	40	40	40		30
Total	654,210	3,835	3,875	3,875	3,875	3,875		3,764

Special Note(s): 1. For the November 15, 2002 base year the board accepted the superintendent-certified capacities as part of the School Facilities Task Force review and 2003 Planners and School Representative Technical Advisory Committee Report. These capacities will remain effective until changed by (1) the School CIP or (2) an amended version of this form that is certified by the BOCC.

Justification:

Capacity Certification:


Superintendent Date

Membership Certification:


Superintendent Date


BOCC Chair Date 12-3-13


BOCC Chair Date 12-3-13

C. Membership Date

1. ***Responsible Entity for Suggesting Change*** – Change can be effectuated only by amendment to Memorandum of Understanding (MOU) by all School APFO partners. The Planning Directors, School Representatives, and Technical Advisory Committee (SAPFOTAC) may advise if a change in date would improve the reporting or timeliness of the report.
2. ***Definition*** – The date at which student membership is calculated. This date is updated each year and also serves as the basis for projections along with the history from previous years. “For purposes of this Memorandum, the term "school membership" means the actual number of students attending school as of November 15 of each year. The figure is determined by considering the number of students enrolled (i.e. registered, regardless of whether a student is no longer attending school) and making adjustments for withdrawals, dropouts, deaths, retentions and promotions. Students who are merely absent from class on the date membership is determined as a result of sickness or some other temporary reason are included in school membership figures. Each year the School District shall transmit its school membership to the parties to this agreement no later than five (5) school days after November 15.
3.

<i>Standard for:</i> Chapel Hill Carrboro School District <div style="text-align: center;"> November 15 of each year </div>	<i>Standard for:</i> Orange County School District <div style="text-align: center;"> November 15 of each year </div>
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4. ***Analysis of Existing Conditions***
This will be analyzed in the future years to determine if it is an exemplary date.
4.

<i>Recommendation –</i> No change at this time	<i>Recommendation –</i> No change at this time
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II. ANNUAL UPDATE TO SCHOOLS ADEQUATE PUBLIC FACILITIES ORDINANCE SYSTEM

A. Capital Investment Plan (CIP)

1. ***Responsible Entity for Suggesting Change*** – The updating of this section will be conducted by the Board of County Commissioners (BOCC) after review of the CIP requests from the School Districts. Action regarding CIP programs usually occurs during the BOCC budget Public Hearing process in the winter and spring of each year. The development of the CIP considers the conditions noted in the SAPFOTAC report released in the same CIP development year including LOS (level of service), capacity, and membership projections.
2. ***Definition*** – The process and resultant program to determine school needs and provide funding for new school facilities through a variety of funding mechanisms.
3. ***Standard for:***

Chapel Hill-Carrboro School District	Orange County School District
Not Applicable	Not Applicable
4. ***Analysis of Existing Conditions***
 The MOU outlines a system of implementing the SAPFO, including issuing Certificates of Adequate Public Schools (CAPS) to new development if capacity is available. The Requests for CAPS will be evaluated using the most recently adopted Capital Investment Plan. A new Capital Investment Plan is currently under development for approval prior to June 30, 2014.
5. ***Recommendation*** –
 Not subject to staff review

Section II

B. Student Projection Methodology

1. ***Responsible Entity for Suggesting Change*** – This section is reviewed and recommended by the Planning Directors, School Representatives, and Technical Advisory Committee (SAPFOTAC) to the BOCC for change, if necessary.
2. ***Definition*** – The method(s) by which student memberships are calculated for future years to determine total membership at each combined school level (Elementary, Middle, and High School) which take into consideration historical membership totals at a specific time (November 15) in the school year. These methods are also known as ‘models’.

3. ***Standard for:*** ***Standard for:***
Chapel Hill Carrboro School District
Orange County School District

Presently, the average of five models is being used: namely 3, 5, and 10 year history/cohort survival methods, Orange County Planning Department Linear Wave, and Tischler Linear methods. Attachment II.B.1 includes a description of each model.

4. ***Analysis of Existing Conditions***

Performance of the models is monitored each year. The value of a projection model is in its prediction of school level capacities at least three years in advance of capacity shortfalls so the annual Capital Investment Plan (CIP) updates can respond proactively with siting, design, and construction. Attachment II.B.1 includes a description of each model. Attachment II.B.3 shows the performance of the models for the 2013-14 school year from the prior year projection.

5. ***Recommendation*** –

More than ten years of projection results are now available. Analysis on the accuracy of the results is showing that some models have better results in one district while others have better results in the other district. The historic growth rate is recorded by the models, but projected future growth is more difficult to accurately quantify. In all areas of the county, proposed growth is not included in the SAPFO projection system until actual students begin enrollment. The system is updated in November of each year, becoming part of the historical projection base. This is especially pertinent in the Orange County School District which serves students living within the Orange County portion of the City of Mebane which have had little historic enrollment impact. The significant proposed residential growth occurring within Mebane’s jurisdiction has yet to be fully entered into the historically based projection methods. Although construction activity in this portion of the county has slowed, there are still a substantial number of approved, but undeveloped residential lots.

Attachment II.B.1

STUDENT MEMBERSHIP PROJECTIONS

PROJECTION TYPE	DESCRIPTION / CHARACTERISTICS	FORMULA	ASSUMPTIONS
Tischler Linear (OCS & CHCCS)	Mathematical formula, straight line projection	$y = ((c-b)^x) \times b$ y=projected population; c=historical annual change; b=base year; x= projection years	Historical growth is reflected in projected growth
OCP Linear Wave (OCS)	Mathematical linear with percent variation among school levels; reflects progressing waves of membership	$BYM + (BY1 + 5(n)) = EYM$ EYM * %SL = EYMSL BYM= base year 2nd month membership; BY1=year student membership increment base; EYM=ensuing year membership; n=projection year; %SL=% of total membership per school level (i.e. elementary, middle, high); EYMSL=ensuing year member by school level	Base year growth reflects 10-year average; increase in BY1 of 5 every other year reflects increases in housing growth; reflects buildout constraints
OCP Linear Wave (CHCCS)	Mathematical linear with percent variation among school levels; reflects progressing waves of membership	$BYM + (BY1 - 15(n)) = EYM$ EYM * %SL = EYMSL BYM= base year 2nd month membership; BY1=year student membership increment base; EYM=ensuing year membership; n=projection year; %SL=% of total membership per school level (i.e. elementary, middle, high); EYMSL=ensuing year member by school level	Base year growth reflects 10-year average; decrease in BY1 of 15 until school year 2010-2011 reflects decreases in housing growth; reflects buildout constraints
3-Year Cohort (OCS & CHCCS)	Mathematical formula that computes the average advancement rate over the previous 3 years for each grade level and then uses each rate to calculate projected membership by school level; an assumed kindergarten membership is based on birth records and/or historical growth rates	$K_n = K_{n-1} + (K_{n-1} * 0.01)$ $a = \frac{\sum_{n=1}^3 G_n / g_{n-1}}{3}$ $b = g_{n-1} (a)$ K=kindergarten membership; n=given school year; G=given grade's membership(other than kindergarten); g= previous grade's membership; a=average advancement rate; b=projected membership	Assumes a 1% annual growth rate for the kindergarten grade level; assumes the same percentage of students in each grade level graduate to the next level each year
5 year Cohort (OCS & CHCCS)	Mathematical formula that computes the average advancement rate over the previous 5 years for each grade level and then uses each rate to calculate projected membership by school level; an assumed kindergarten membership is based on birth records and/or historical growth rates	$K_n = K_{n-1} + (K_{n-1} * 0.01)$ $a = \frac{\sum_{n=1}^5 G_n / g_{n-1}}{5}$ $b = g_{n-1} (a)$ K=kindergarten membership; n=given school year; G=given grade's membership(other than kindergarten); g= previous grade's membership; a=average advancement rate; b=projected membership	Assumes a 1% annual growth rate for the kindergarten grade level; assumes the same percentage of students in each grade level graduate to the next level each year
10 year Cohort (OCS & CHCCS)	Mathematical formula that computes the average advancement rate over the previous 10 years for each grade level and then uses each rate to calculate projected membership by school level; an assumed kindergarten membership is based on birth records and/or historical growth rates	$K_n = K_{n-1} + (K_{n-1} * 0.01)$ $a = \frac{\sum_{n=1}^{10} G_n / g_{n-1}}{10}$ $b = g_{n-1} (a)$ K=kindergarten membership; n=given school year; G=given grade's membership(other than kindergarten); g= previous grade's membership; a=average advancement rate; b=projected membership	Assumes a 1% annual growth rate for the kindergarten grade level; assumes the same percentage of students in each grade level graduate to the next level each year

**Orange County School District
School Membership 2012-13 School Year (November 15, 2012)**

	11/15/11 Actual 2011-12	2012 Report Projection for 2012-13	11/15/12 Actual 2012-13	Change between actual Nov 2011 - Nov 2012
Elementary	3348		3403	+55
Model			Projection is	
T		3407	H4	
OCP		3407	H4	
10C		3455	H52	
5C		3447	H44	
3C		3472	H69	
AVG		3438	H35	
			11/15/2012	
Middle	1704		1684	-20
Model			Projection is	
T		1734	H50	
OCP		1759	H75	
10C		1691	H7	
5C		1700	H16	
3C		1697	H13	
AVG		1716	H32	
			11/15/2012	
High	2283		2315	+32
Model			Projection is	
T		2323	H8	
OCP		2289	L26	
10C		2248	L67	
5C		2265	L50	
3C		2264	L51	
AVG		2278	L37	
			11/15/2012	
Totals				
Elementary	3348		3403	
Middle	1704		1684	
High	2283		2315	
	7335		7402	+67
Model			Projection is	
T		7464	H62	
OCP		7455	H53	
10C		7394	L8	
5C		7412	H10	
3C		7433	H31	
AVG		7432	H30	

H means High

L means Low

**Orange County School District
School Membership 2012-2013 School Year (November 15, 2012)**

Statistical Findings

<i>PROJECTION TYPE ABBREVIATIONS</i>	
'TISCHLER' LINEAR (T)	10-YEAR COHORT (10C)
ORANGE COUNTY PLANNING (OCP)	5-YEAR COHORT (5C)
	3-YEAR COHORT (3C)

Elementary School Level

- Projections were all high, ranging from 4 students to 69 students high. The average of the projections was 35 students higher than actual student membership.
- The membership actually increased by 55 students between November 15, 2011 and November 15, 2012.

Middle School Level

- Projections were all high, ranging from 7 students to 75 students high. On average, the projections were 32 students higher than the actual membership.
- The membership actually decreased by 20 students between November 15, 2011 and November 15, 2012.

High School Level

- Projections were primarily low ranging from being low by 67 students to 8 students high. On average, the projections were 37 students lower than the actual membership.
- The membership actually increased by 32 students between November 15, 2011 and November 15, 2012.

TOTAL

- The totals of all school level projections were primarily high, ranging from 8 below actual membership to 62 above actual membership. On average, the projections were high by 30 students.
- The membership increased in total by 67 students, which is the sum of +55 at Elementary, -20 at Middle and +67 at High.

Chapel Hill/Carrboro School District
School Membership 2012-2013 School Year (November 15, 2012)

	11/15/11 Actual 2011-12	2012 Report Projection for 2012-13	11/15/12 Actual 2012-13	Change between actual Nov 2011- Nov 2012
Elementary	5464		5543	+79
Model			Projection is	
T		5563	H20	
OCP		5531	L12	
10C		5609	H66	
5C		5594	H51	
3C		5565	H22	
AVG		5572	H29	
			<u>11/15/2012</u>	
Middle	2753		2785	+32
Model			Projection is	
T		2803	H18	
OCP		2796	H11	
10C		2807	H22	
5C		2802	L17	
3C		2774	L11	
AVG		2796	H11	
			<u>11/15/2012</u>	
High	3617		3796	+82
Model			Projection is	
T		3781	L15	
OCP		3829	H33	
10C		3774	L22	
5C		3765	L31	
3C		3766	L30	
AVG		3783	L13	
Totals			<u>11/15/2012</u>	
Elementary	5464		5543	
Middle	2753		2785	
High	<u>3714</u>		<u>3796</u>	
	11931		12124	+193
Model			Projection is	
T		12147	H23	
OCP		12156	H32	
10C		12190	H66	
5C		12161	H37	
3C		12105	L19	
AVG		12151	H27	

H means High
L means Low

**Chapel Hill/Carrboro School District
School Membership 2012-2013 School Year (November 15, 2012)**

Statistical Findings

<i>PROJECTION TYPE ABBREVIATIONS</i>	
'TISCHLER' LINEAR (T) ORANGE COUNTY PLANNING (OCP)	10-YEAR COHORT (10C) 5-YEAR COHORT (5C) 3-YEAR COHORT (3C)

Elementary School Level

- Projections were primarily high, ranging from 12 students low to 66 students high. On average, the projections were 29 students higher than the actual membership.
- The actual membership increased by 79 students between November 15, 2011 and November 15, 2012.

Middle School Level

- Projections were mixed low and high, ranging from 17 students low to 22 students high. On average, the projections were 11 students higher than the actual membership.
- The actual membership increased by 32 students between November 15, 2011 and November 15, 2012.

High School Level

- Projections were primarily low, ranging from 31 students low to 33 students high. On average, the projections were 13 students lower than the actual membership.
- The actual membership increased by 82 students between November 15, 2011 and November 15, 2012.

TOTAL

- The total of all school level projections were primarily high, ranging from 19 below actual membership to 66 student above actual membership. On average the projections were high by 27 students.
- The membership increased in total by 193 students, which is the sum of +79 at Elementary, +32 at Middle, and +82 at High.

Section II

Orange County School District
School Membership 2013-14 School Year (November 15, 2013)

	11/15/12 Actual 2012-13	2013 Report Projection for 2013-14	11/15/13 Actual 2013-14	Change between actual Nov 2012 - Nov 2013
Elementary	3403		3433	+30
Model			Projection is	
T		3460	H27	
OCP		3462	H29	
10C		3416	L17	
5C		3415	L18	
3C		3411	L22	
AVG		3433		
			<u>11/15/2013</u>	
Middle	1684		1747	+63
Model			Projection is	
T		1712	L35	
OCP		1709	L38	
10C		1750	H3	
5C		1755	H8	
3C		1740	L7	
AVG		1733	L14	
			<u>11/15/2013</u>	
High	2315		2421	+106
Model			Projection is	
T		2354	L67	
OCP		2356	L65	
10C		2334	L87	
5C		2362	L59	
3C		2367	L54	
AVG		2355	L66	
			<u>11/15/2013</u>	
Totals				
Elementary	3403		3433	
Middle	1684		1747	
High	<u>2315</u>		<u>2421</u>	
	7402		7601	+199
Model			Projection is	
T		7526	L75	
OCP		7527	L74	
10C		7500	L101	
5C		7532	L69	
3C		7518	L83	
AVG		7521	L80	

H means High
L means Low

**Orange County School District
School Membership 2013-2014 School Year (November 15, 2013)**

Statistical Findings

<i>PROJECTION TYPE ABBREVIATIONS</i>	
'TISCHLER' LINEAR (T)	10-YEAR COHORT (10C)
ORANGE COUNTY PLANNING (OCP)	5-YEAR COHORT (5C)
	3-YEAR COHORT (3C)

Elementary School Level

- Projections were mixed low and high, ranging from 22 students low to 29 students high. The average of the projections equaled actual student membership.
- The membership actually increased by 30 students between November 15, 2012 and November 15, 2013.

Middle School Level

- Projections were mixed low and high, ranging from 38 students low to 8 students high. On average, the projections were 14 students lower than the actual membership.
- The membership actually increased by 63 students between November 15, 2012 and November 15, 2013.

High School Level

- Projections were all low ranging from 54 students to 87 students low. On average, the projections were 66 students lower than the actual membership.
- The membership actually increased by 106 students between November 15, 2012 and November 15, 2013.

TOTAL

- The totals of all school level projections were low, ranging from 69 to 101 below actual membership. On average, the projections were low by 80 students.
- The membership increased in total by 199 students, which is the sum of +30 at Elementary, +63 at Middle, and +106 at High.

Chapel Hill/Carrboro School District
School Membership 2013-14 School Year (November 15, 2013)

	11/15/12 Actual 2012-13	2013 Report Projection for 2013-14	11/15/13 Actual 2013-14	Change between actual Nov 2012- Nov 2013
Elementary	5543		5554	+11
Model			Projection is	
T		5643	H89	
OCP		5643	H89	
10C		5603	H49	
5C		5583	H29	
3C		5589	H35	
AVG		5612	H58	
			11/15/2013	
Middle	2785		2858	+73
Model			Projection is	
T		2835	L23	
OCP		2840	L18	
10C		2888	H30	
5C		2873	H15	
3C		2872	H14	
AVG		2862	H4	
			11/15/2013	
High	3796		3764	-32
Model			Projection is	
T		3864	H100	
OCP		3890	H126	
10C		3794	H30	
5C		3782	H18	
3C		3810	H46	
AVG		3828	H64	
Totals			11/15/2013	
Elementary	5543		5554	
Middle	2785		2858	
High	3796		3764	
	12,124		12,176	+52
Model			Projection is	
T		12,342	H166	
OCP		12,373	H197	
10C		12,285	H109	
5C		12,238	H62	
3C		12,271	H95	
AVG		12,302	H126	

H means High

L means Low

**Chapel Hill/Carrboro School District
School Membership 2013-2014 School Year (November 15, 2013)**

Statistical Findings

<i>PROJECTION TYPE ABBREVIATIONS</i>	
'TISCHLER' LINEAR (T) ORANGE COUNTY PLANNING (OCP)	10-YEAR COHORT (10C) 5-YEAR COHORT (5C) 3-YEAR COHORT (3C)

Elementary School Level

- Projections were all high, ranging from 29 students to 89 students high. On average, the projections were 58 students higher than the actual membership.
- The actual membership increased by 11 students between November 15, 2012 and November 15, 2013.

Middle School Level

- Projections were mixed low and high, ranging from 23 students low to 30 students high. On average, the projections were 4 students higher than the actual membership.
- The actual membership increased by 73 students between November 15, 2012 and November 15, 2013.

High School Level

- Projections were all high, ranging from 18 students to 126 students high. On average, the projections were 64 students higher than the actual membership.
- The actual membership decreased by 32 students between November 15, 2012 and November 15, 2013.

TOTAL

- The total of all school level projections were all high, ranging from 62 students to 197 students above actual membership. On average, the projections were high by 126 students.
- The membership increased in total by 52 students, which is the sum of +11 at Elementary, +73 at Middle, and -32 at High.

C. Student Projections

1. ***Responsible Entity for Suggesting Change*** – The updating of this section will be conducted by the Planning Directors, School Representatives, and Technical Advisory Committee (SAPFOTAC) and referred to the BOCC for annual report certifications.

Projections will be distributed to SAPFO partners for review and comments to the BOCC prior to certification.

2. ***Definition*** – The result of the average of the five student projection models represented by 10 year numerical membership projections by school level (Elementary, Middle, and High) for each school district (Chapel Hill/Carrboro School District and Orange County School District).

3. ***Standard for:***

Chapel Hill Carrboro School District

The 5 model average discussed in Section II.B
(Student Projection Methodology)
See Attachment II.C.4

Standard for:

Orange County School District

The 5 model average discussed in Section II.B
(Student Projection Methodology)
See Attachment II.C.3

4. ***Analysis of Existing Conditions***

The membership figures and percentage growth on the attachments show continued growth in both systems. Average projected growth rates in the next 10 years for both school systems are quite similar and follow the same growth pattern for each individual school year. Both school systems are showing a projected decrease in the increase, but are still showing positive growth at the Elementary and Middle School levels. Orange County High School is projected to experience a negative growth rate in 2014-15 followed by positive growth rates for the remaining 10 year projections. Chapel Hill/Carrboro High School is showing varying positive growth rates over the next ten years. Year-by-year percent growth is shown on the attached table as well as the projected LOS. The projection models were updated using current (November 15, 2013) memberships. Ten years of student membership were projected thereafter.

Chapel Hill Carrboro School District

Elementary

The previous year (2012-13) projections for November 2013 at this level were overestimated by 58 students. The actual membership increased by 11 students. Over the previous ten years, this level has shown varying increases in growth rates including a decrease in actual membership in 2009-10 which was most likely due to the shorter enrollment period caused by the institution of the new date requiring kindergarteners to be five years old. Following that dip, membership numbers are again increasing, with a significant jump (168 students) in 2011-12. This large increase was followed by smaller increases in 2012-13 of 79 students and in 2013-14 of only 11 students. Growth rates during the past ten years have ranged from -1.57% to +3.92%.

Elementary School #11 (Northside Elementary) opened for the 2013-14 school year with a capacity of 585 seats. The projections this year are showing the need for Elementary School #12 in 2020-21, which is one year earlier than last year's projections.

Although not included in SAPFO school capacity or membership numbers, Pre-K programs continue to impact operations at District elementary schools where Pre-K programs exist. Specific impacts of Pre-K programs at the elementary school level will continue to be reviewed and discussed in the coming year.

Middle

The previous year (2012-13) projections for November 2013 for this level were overestimated by 4 students. The actual membership increased by 73. Over the previous ten years, growth has been quite variable and included a decrease in actual membership in 2004-05. Following this decrease, membership and growth rates have experienced increases every school year since. Growth rates during this time period have ranged from -1.99% to +2.86 percent with most years showing a growth rate of around 1% or less. The planned addition to Culbreth Middle School for the 2014-15 school year is proposed to increase capacity with the addition of 104 seats. As a result, projections show that Chapel Hill/Carrboro Middle School #5 is projected to be needed in 2020-21. This is three years later than last year's projections. The proposed addition to Culbreth Middle School was approved in the 2013-14 CIP for the 2014-15 school year. Although capacity was projected to be available, a decision was made to fund the expansion and increase capacity.

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The additional capacity resulting from the approved addition has been included in the student projections.

High School

The previous year (2012-13) projections for November 2013 for this level were overestimated by 64 students. The actual membership decreased by 32 students. Over the previous ten years, change has been variable with decreases in membership in 2008-09 and in 2009-10. Following these decreases, membership and growth rates began increasing again within the last three years before experiencing another decrease this year (2013-14). Growth rates during this time period have ranged from -0.84% to +5.31%. This year's projections show that additional capacity is needed in 2023-24, which is three years later than last year's projection. Additional High School capacity is expected to be achieved by expanding Carrboro High School from 800 students to 1,200 students, which was included in the construction plans for the high school.

Additional Information for Chapel Hill Carrboro School District

Currently, one Charter School, PACE Academy, serves high school students residing in the Chapel Hill/Carrboro School District. This school is not included as part of the SAPFO Annual Report and, as a result, its membership and capacity is not monitored or included in future projections. On February 6, 2014 PACE Academy had their charter revoked for the 2014-2015 school year. Administrators are currently exploring the appeal process with the State Board of Education. However, CHCCS student membership may experience an increase in 2014-15 due to the influx of students from PACE Academy becoming part of the Chapel Hill/Carrboro School District if the school's charter is not renewed through the appeals process.

Orange County School District

Elementary

The previous year (2012-13) projections for November 2013 at this level were equal to student membership. Actual membership increased by 30 students. Over the previous ten years, this level has experienced varying growth rates including a decrease in membership in 2005-06. Following this decrease, membership and growth rates have experienced increases every school year since. Growth rates during this period have ranged from -0.33% to +2.80%. In the Orange County school system, historic growth is more closely related to new residential development than in the Chapel Hill/Carrboro School District, which has a sizeable number of new families in

Section II

older, existing housing stock. Projections this year are showing the need for Elementary School #8 in 2023-24 when the LOS is expected to be 105.7%.

Although not included in SAPFO school capacity or membership numbers, Pre-K programs continue to impact operations at District elementary schools where Pre-K programs exist. Specific impacts of Pre-K programs at the elementary school level will continue to be reviewed and discussed in the coming year.

Middle

The previous year (2012-13) projections for November 2013 for this level were underestimated by 14 students. The actual membership increased by 63. Over the previous ten years, growth has varied widely and includes decreases in student membership in five of the ten years. Growth rates during this period have ranged from -4.67% to +4.00%. The district's third Middle School, Gravelly Hill Middle School, opened in October 2006. The need for an additional Middle School is not anticipated in the 10-year projection period. However, staff is closely monitoring new sizeable residential projects in the Orange County portion of Mebane and Hillsborough.

High School

The previous year (2012-13) projections for November 2013 for this level were underestimated by 66 students. The actual membership increased by 106. Over the previous ten years, growth varied considerably and included a decrease in membership in 2009-10. Following this decrease, membership and growth rates have experienced increases every school year since. Growth rates during this period ranged from -1.12% to 9.01%. In 2011-12 student membership increased by 32 while capacity decreased by 199 at Orange County High School as a result of a N.C. Department of Public Instruction (DPI) study. This year's projections show that additional capacity is needed in 2022-23. This is different from last year's projections which did not show a need for additional capacity in the 10-year projection period.

Additional High School capacity is expected to be achieved by expanding Cedar Ridge High School from 1,000 students to 1,500 students. This addition is currently included in the five year CIP as a request for funding. At this time, a decision has not been made approving the proposed addition. Once a funding decision is made and approved, the increased capacity from the proposed addition may be included in the student projections.

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Additional Information for Orange County School District

The City of Mebane lies partially within Orange County and students within the Orange County portion of Mebane attend Orange County schools. However, the City of Mebane is not a party to the SAPFO agreement and therefore does not require that CAPS (Certificate of Adequate Public Schools) be issued prior to development approvals. In previous years, development activity and platting of new subdivisions increased within the Orange County portion of Mebane. However, changed economic conditions have curbed new platting and new construction in the past few years. An uptick in residential activity is likely as the country emerges from “The Great Recession.” Increased coordination with the City of Mebane regarding development issues may be necessary in the future. OCS currently has capacity to serve additional growth, but it is possible that development in the Orange County portion of Mebane could quickly encumber available capacity.

Following the economic downturn, there has been an increase in multi-family residential development which has added to increasing student memberships in both districts. The ongoing future demand for multi-family housing is evident throughout the county, but especially within the Town of Hillsborough which is facing the proposed development of 700 multi-family units in the near future. Staff will need to continue monitoring and evaluating the demand and growth of the multi-family market in Hillsborough and the entire county as well as its effect on student membership rates.

Currently, one charter school is located in the Town of Hillsborough and serves students that reside in the Orange County School District. This school is not included as part of the SAPFO Annual Report and as a result its membership and capacity is not monitored or included in future projections. An additional charter school is being proposed in the Town of Hillsborough for the 2014-15 school year. As a result, OCS student memberships may experience a decrease in 2014-15 due to a loss of students enrolling in the new charter school.

5. *Recommendation –*

Use statistics as noted in 3 above

Section II

Attachment II.C.1
(2012-13)

OCS Student Projections (14)

Elementary	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
School Year																							
Actual	3,178	3,283	3,403	3,545	3,716	3,915	4,142	4,397	4,681	4,993	5,333	5,701	6,100	6,532	6,998	7,498	8,033	8,604	9,212	9,858	10,543	11,267	12,030
Projected																							
10 Year Growth																							
2 Year Growth																							
3 Year Growth																							
Annual Change - Increase (Decrease) in Actual & Projected Membership																							
Capacity - 100% Level of Service	3,020	3,250	3,500	3,750	4,000	4,250	4,500	4,750	5,000	5,250	5,500	5,750	6,000	6,250	6,500	6,750	7,000	7,250	7,500	7,750	8,000	8,250	8,500
Number of Students Actual and Projected, Over (Under) 100% LOS	(72)	(27)	(153)	(255)	(284)	(335)	(353)	(393)	(409)	(451)	(467)	(501)	(500)	(450)	(350)	(250)	(150)	(50)	(50)	(50)	(50)	(50)	(50)
10% Level of Service	4,911	5,011	5,111	5,211	5,311	5,411	5,511	5,611	5,711	5,811	5,911	6,011	6,111	6,211	6,311	6,411	6,511	6,611	6,711	6,811	6,911	7,011	7,111
Number of Students Actual and Projected, Over (Under) 10% LOS	(83)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)
10% Level of Service	4,911	5,011	5,111	5,211	5,311	5,411	5,511	5,611	5,711	5,811	5,911	6,011	6,111	6,211	6,311	6,411	6,511	6,611	6,711	6,811	6,911	7,011	7,111
Annual Student Growth Rate (%)	4.8%	3.2%	3.5%	3.8%	4.1%	4.4%	4.7%	5.0%	5.3%	5.6%	5.9%	6.2%	6.5%	6.8%	7.1%	7.4%	7.7%	8.0%	8.3%	8.6%	8.9%	9.2%	9.5%

Indicates when district surpasses Scholastic APFO recommended Level of Service

(1) It is important to note that the effect the November 15, 2012 date of membership is outlined in by the Scholastic APFO recommended Level of Service

(2) The Teacher Model provides for the "Lower Member" of Projections for both CHCS and OCS. Original projections used in prior years projection models included the "Lower Extrapolation Method" for CHCS

(3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23

(4) Class sizes for grades K-2 = 12 for school year 2003 through 2007-08. In accordance with 2008-2009 school year with the opening of CHCS Elementary #18, K-3 class sizes are 12 as directed by past State legislative action.

OCS Student Projections (1)

Middle	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
School Year																							
Actual	1,534	1,572	1,611	1,651	1,691	1,731	1,771	1,811	1,851	1,891	1,931	1,971	2,011	2,051	2,091	2,131	2,171	2,211	2,251	2,291	2,331	2,371	2,411
Projected																							
10 Year Growth																							
2 Year Growth																							
3 Year Growth																							
Annual Change - Increase (Decrease) in Actual & Projected Membership																							
Capacity - 100% Level of Service	1,466	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486	1,486
Number of Students Actual and Projected, Over (Under) 100% LOS	38	61	165	205	205	127	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
10% Level of Service	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569
Number of Students Actual and Projected, Over (Under) 10% LOS	(63)	(42)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)
10% Level of Service	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569
Annual Student Growth Rate (%)	1.5%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%

Indicates when district surpasses Scholastic APFO recommended Level of Service

(1) It is important to note that the effect the November 15, 2012 date of membership is outlined in by the Scholastic APFO recommended Level of Service

(2) The Teacher Model provides for the "Lower Member" of Projections for both CHCS and OCS. Original projections used in prior years projection models included the "Lower Extrapolation Method" for CHCS

(3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23

OCS Student Projections (1)

High	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
School Year																							
Actual	1,072	1,103	1,133	1,163	1,193	1,223	1,253	1,283	1,313	1,343	1,373	1,403	1,433	1,463	1,493	1,523	1,553	1,583	1,613	1,643	1,673	1,703	1,733
Projected																							
10 Year Growth																							
2 Year Growth																							
3 Year Growth																							
Annual Change - Increase (Decrease) in Actual & Projected Membership																							
Capacity - 100% Level of Service	1,134	1,174	1,214	1,254	1,294	1,334	1,374	1,414	1,454	1,494	1,534	1,574	1,614	1,654	1,694	1,734	1,774	1,814	1,854	1,894	1,934	1,974	2,014
Number of Students Actual and Projected, Over (Under) 100% LOS	154	229	269	309	349	389	429	469	509	549	589	629	669	709	749	789	829	869	909	949	989	1,029	1,069
10% Level of Service	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070
Number of Students Actual and Projected, Over (Under) 10% LOS	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10% Level of Service	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070	1,070
Annual Student Growth Rate (%)	4.4%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%

Indicates when district surpasses Scholastic APFO recommended Level of Service

(1) It is important to note that the effect the November 15, 2012 date of membership is outlined in by the Scholastic APFO recommended Level of Service

(2) The Teacher Model provides for the "Lower Member" of Projections for both CHCS and OCS. Original projections used in prior years projection models included the "Lower Extrapolation Method" for CHCS

(3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23

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CHCCS Student Projections (1) (4)

School Year	2009-01	2007-02	2007-03	2007-04	2007-05	2007-06	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2007-13	2007-14	2007-15	2007-16	2007-17	2007-18	2007-19	2007-20	2007-21	2007-22	2007-23
Actual	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Teacher	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
10 Year Growth	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
5 Year Growth	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Average	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Annual Change - Increase (Decrease) in Actual & Projected Membership	4,022	4,302	4,392	4,392	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521
Capacity - 100% Level of Service (LOS)	4,022	4,302	4,392	4,392	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521
Number of Students, Actual and Projected, Over (Under) 100% LOS	432	172	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249
Capacity - 100% Level of Service (LOS)	4,022	4,302	4,392	4,392	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521	4,521
Number of Students, Actual and Projected, Over (Under) 100% LOS	432	172	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249
Average - % Level of Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Annual Student Growth Rate (2)	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%

1) The important note that the reflects the November 15, 2012 date of membership is outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.

2) The Teacher Model provides for the "Linear Method" of Projections for both CHCCS and CCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.

3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23.

4) Class sizes for grades K-3 = 1:20 for school years 2008 through 2007-08. In accordance with 2005 School Collaboration Work Group decision, effective the 2008-2009 school year with the opening of CHCCS Elementary #18, K-3 class size set at 1:21 as directed by past State legislative action.

CHCCS Student Projections (1)

School Year	2009-01	2007-02	2007-03	2007-04	2007-05	2007-06	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2007-13	2007-14	2007-15	2007-16	2007-17	2007-18	2007-19	2007-20	2007-21	2007-22	2007-23
Actual	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Teacher	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
10 Year Growth	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
5 Year Growth	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Average	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Annual Change - Increase (Decrease) in Actual & Projected Membership	2,108	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840
Capacity - 100% Level of Service	2,108	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840
Number of Students, Actual and Projected, Over (Under) 100% LOS	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218
Capacity - 100% Level of Service	2,108	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840
Number of Students, Actual and Projected, Over (Under) 100% LOS	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218
Average - % Level of Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Annual Student Growth Rate (2)	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%

1) The important note that the reflects the November 15, 2012 date of membership is outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.

2) The Teacher Model provides for the "Linear Method" of Projections for both CHCCS and CCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.

3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23.

CHCCS Student Projections (1)

School Year	2009-01	2007-02	2007-03	2007-04	2007-05	2007-06	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2007-13	2007-14	2007-15	2007-16	2007-17	2007-18	2007-19	2007-20	2007-21	2007-22	2007-23
Actual	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Teacher	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
10 Year Growth	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
5 Year Growth	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Average	2,254	2,306	2,400	2,413	2,506	2,572	2,621	2,672	2,721	2,768	2,814	2,859	2,904	2,949	2,994	3,039	3,084	3,129	3,174	3,219	3,264	3,309	3,354
Annual Change - Increase (Decrease) in Actual & Projected Membership	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008
Capacity - 100% Level of Service	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008
Number of Students, Actual and Projected, Over (Under) 100% LOS	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Capacity - 100% Level of Service	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008	3,008
Number of Students, Actual and Projected, Over (Under) 100% LOS	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Average - % Level of Service	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Annual Student Growth Rate (2)	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%

1) The important note that the reflects the November 15, 2012 date of membership is outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.

2) The Teacher Model provides for the "Linear Method" of Projections for both CHCCS and CCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.

3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23.

REVISED 2/21/2014

Important Note: Per 2015 recommendation of School Collaboration Work Group and approved by BOCC with approval of 2006-09 Membership & Capacity numbers and certification of 2009 SAPOTAC report of May 2009, Grades K-3 class size reduced from 1:23 to 1:21 with opening of OMCIS Elementary #10-Norris Grove will allow for prior legislative action re: reduced class size.

Indicates when district surpasses Schools APPO recommended Level of Service

It is important to note that this reflects the November 15, 2013 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance.

the School's Adequate Public Facilities Ordinance.

original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCS,

age membership for years 2014-15 through 2023-24
School Collaboration Work Group direction, effective the 2008-2009 school year with the opening of CHCCS Elementary #10. K-3 class sizes are 1:21 as directed by past State legislative action.

Middle																								
2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
1,504	1,527	1,631	1,671	1,552	1,560	1,590	1,837	1,601	1,665	1,868	1,704	1,884	1,747											
Actual																								
Estimate																								
2 Year Growth																								
3 Year Growth																								
4 Year Growth																								
5 Year Growth																								
Average																								
1,486	1,448	1,584	1,604	1,568	1,580	1,608	1,816	1,584	1,648	1,856	1,696	1,888	1,752	1,792	1,864	1,928	1,968	1,932	1,968	1,992	2,024	2,052	2,080	
Capacity, -100% Level of Service																								
38	61	195	205	177	134	198	159	166	168	168	168	168	168	168	168	168	168	168	168	168	168	168	168	
Number of Students, Actual and Projected, Over (Under) 100%, 105																								
1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	1,569	
67% Level of Service																								
1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	
Number of Students, Actual and Projected, Over (Under) 100%, 105																								
1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	
102.8%																								
Actual, % Level of Service																								
1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	
Annual Student Growth Rate (g)																								
1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	1,489	
Annual Student Growth Rate (g)																								

indicates when district surpasses Schools APFO recommended Level of Service

It is important to note that this reflects the November 15, 2013 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance

Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS,

Page membership for years 2014-15 through 2023-24

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
2000-01 Actual	1,672	1,753	1,838	1,897	2,002	2,124	2,184	2,301	2,442	2,582	2,722	2,863	2,915	2,943	2,966	2,981	2,948	2,981	2,933	2,916	2,718	2,700	2,603	2,442
2001-02 Actual																								
2002-03 Actual																								
2003-04 Actual																								
2004-05 Actual																								
2005-06 Actual																								
2006-07 Actual																								
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2023-24 Actual																								
Average	1,518	1,591	1,670	1,719	1,818	1,918	2,033	2,158	2,298	2,448	2,598	2,748	2,898	3,048	3,198	3,348	3,498	3,648	3,798	3,948	4,098	4,248	4,398	4,548
General College Income (Decrease) as Actual & Projected Membership	1,518	1,591	1,670	1,719	1,818	1,918	2,033	2,158	2,298	2,448	2,598	2,748	2,898	3,048	3,198	3,348	3,498	3,648	3,798	3,948	4,098	4,248	4,398	4,548
General College Income (Decrease) as Actual & Projected, Over 100% LOS	1,518	1,591	1,670	1,719	1,818	1,918	2,033	2,158	2,298	2,448	2,598	2,748	2,898	3,048	3,198	3,348	3,498	3,648	3,798	3,948	4,098	4,248	4,398	4,548
General College Income (Decrease) as Actual & Projected, Over 100% LOS	1,518	1,591	1,670	1,719	1,818	1,918	2,033	2,158	2,298	2,448	2,598	2,748	2,898</											

transmission of the virus and the presence of the virus in the blood of the donor.

²¹ The Tischler Model provides for the "Linear Method" of projections for both CHCCS and OCS. Original projections used in prior years' projection models are important to note that this reflects the November 15, 2013 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance.

Average membership for years 2014-15 through 2023-24

al data are included in the above tables.

CHCCS Student Projections ^{(1) (4)}[illegible]

¹⁰ It is important to note that this reflects the November 15, 2012 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.

^{d)} Class sizes for grades K-3 = 1:23 for school years 2000 through 2007-08. In accordance with 2005 School Collaboration Work Group direction, effective the 2008-2009 school year with the opening of CHCCS Elementary #10, K-3 class sizes are 1:21 as directed by past State legislative action.

CHCCS Student Projections ⁽¹⁾

School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
2000-01	7,430	7,464	7,498	7,532	7,566	7,599	7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2001-02		7,464	7,498	7,532	7,566	7,599	7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2002-03			7,498	7,532	7,566	7,599	7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2003-04				7,532	7,566	7,599	7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2004-05					7,566	7,599	7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2005-06						7,599	7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2006-07							7,633	7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2007-08								7,667	7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2008-09									7,701	7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2009-10										7,735	7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2010-11											7,769	7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2011-12												7,803	7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2012-13													7,837	7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2013-14														7,871	7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2014-15															7,905	7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2015-16																7,939	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2016-17																	7,973	8,007	8,041	8,075	8,109	8,143	8,177	8,211
2017-18																		8,007	8,041	8,075	8,109	8,143	8,177	8,211
2018-19																			8,041	8,075	8,109	8,143	8,177	8,211
2019-20																				8,075	8,109	8,143	8,177	8,211
2020-21																					8,109	8,143	8,177	8,211
2021-22																						8,143	8,177	8,211
2022-23																							8,177	8,211
2023-24																								8,211
Average																								
Annual Change - Increase (Decrease) in Actual & Projected Membership																								
Capacity - 100% Level of Service																								
100% Level of Service																								
Number of Students, Actual and Projected, Over (Under) 100% LOS																								
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Number of Students, Actual and Projected, Over (Under) 100% LOS																								

indicates when district surpasses Schools APFO recommended Level of Service

^{b)} It is important to note that this reflects the November 16, 2012 date of membership as outlined in by the Schools Aseguate Public Facilities Ordinance. It does not include CHCS students attending the Hospital School. The Teacher Model provides for the "Linear Method" of projections for both CHCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCS. Annual growth rate calculated using annual membership for years 2000-2011 and average membership for years 2012-13, 14 through 2022-23.

CHCCS Student Projections ⁽¹⁾

	2000-01	2001-02	2002-03	2003-04	2004-05	2004-06	2004-07	2007-08	2009-09	2010-10	2011-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2020-21	2021-22	2022-23	2023-24
High School																							
Actual	2,815	2,893	3,165	3,390	3,472	3,514	3,520	2,625	3,630	3,605	3,646	3,114	2,735	3,764	3,697	3,981	3,654	4,017	4,800	4,207	4,703	4,334	4,597
Tenured																							
OC Students																							
OC Students																							
3-Year Growth																							
3-Year Growth																							
1-Year Growth																							
1-Year Growth																							
Average																							
Annual Change - Increase (Decrease) in Actual & Projected (Membership)	3,036	148	199	668	92	92	6	115	61	142	34	74	32	272	378	392	29	89	39	79	92	94	92
100% LOE	2,820	2,928	3,202	3,428	3,510	3,552	3,558	2,635	3,640	3,615	3,656	3,120	2,747	3,779	3,712	4,000	3,678	4,031	4,811	4,218	4,715	4,351	4,613
Number of Students, Actual and Projected, Over (Under) 100% LOE	(220)	(72)	127	266	387	479	666	(206)	(500)	(224)	(236)	(181)	(76)	(3,747)	(60)	(66)	3,697	3,607	138	211	237	324	303
100% Level of Service	3,239	3,239	3,239	3,239	3,239	3,239	3,239	4,219	4,219	4,219	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263
Number of Students, Actual and Projected, Over (Under) 100% LOE	(624)	(576)	(177)	69	83	178	92	(694)	(534)	(613)	(673)	(649)	(603)	(4,522)	(468)	(437)	(286)	(293)	(261)	(177)	(169)	(84)	6
Actual - % Level of Service	82.6%	87.6%	104.2%	107.7%	112.3%	115.8%	115.8%	84.6%	84.7%	84.1%	85.2%	85.3%	85.3%	87.1%	87.4%	87.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Annual Student Growth Rate (%)	6.2%	6.2%	6.2%	6.2%	2.8%	0.2%	0.2%	3.2%	1.6%	3.6%	0.8%	1.7%	2.2%	0.8%	1.8%	0.4%	1.7%	2.7%	0.7%	0.8%	0.6%	0.5%	0.5%

[illegible]

¹⁹ It is important to note that this reflects the November 15, 2012 date of membership as outlined in the School Adequate Public Facilities Ordinance. It does not include CHCS students attending the Hospital School for the Teacher Training Program. Original projections used in prior years' projection models included the "Linear Method" projections for both CHCS and CCS. Original projections used in prior years' projection models included the "Linear Extrapolation Method" for CHCS. Annual growth rate calculated using annual membership for years 2008-2011 and average membership for years 2012-14 through 2022-23.

The Tischler model uses 14 years of historical data, but do to space constraints only 10 years of historical data are included in the above table.

D. Student Membership Growth Rate

1. **Responsible Entity for Suggesting Change** – The updating of this section will be conducted by the Planning Directors, School Representatives, and Technical Advisory Committee (SAPFOTAC) each year and referred to the BOCC for annual report certification.

Projections will be distributed to SAPFO partners for review and comments to the BOCC prior to certification.

2. **Definition** – The annual percentage growth rate calculated from the projections resulting from the average of the five models represented by 10 year numerical membership projections by school level for each school district. This does not represent the year-by-year growth rate that may be positive or negative, but rather the average of the annual anticipated growth rates over the next ten (10) years.

3. **Standard for:**

Chapel Hill Carrboro School District

See Attachment II.D.2

Standard for:

Orange County School District

See Attachment II.D.2

4. **Analysis of Existing Conditions**

The membership figures and percentage growth on the attachments show continued growth at each school level within the system.

Projected Average Annual Growth Rate over next ten years:

Analysis of Existing Conditions

The membership figures and percentage growth on the attachments show continued growth at each school level within the system.

Projected Average Annual Growth Rate over next ten years:

Year Projection Made:	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Elementary	1.72%	1.44%	1.59%	1.18%	1.44%
Middle	1.93%	1.67%	1.94%	1.59%	1.58%
High	1.8%	1.57%	1.73%	1.60%	1.27%

Year Projection Made:	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Elementary	1.34%	1.57%	1.6%	1.31%	1.30%
Middle	1.53%	1.84%	2.01%	1.64%	1.42%
High	1.38%	1.59%	1.61%	1.43%	1.35%

5. Recommendation - Use statistics as noted.

Recommendation - Use statistics as noted

2012-2013

Orange County Student Projections

Elementary

School Year	2012-2013 (actual)	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23
Membership	3,403	3,433	3,479	3,574	3,622	3,654	3,698	3,742	3,786	3,830	3,875
Average % Increase		0.88%	1.35%	2.72%	1.34%	0.88%	1.21%	1.19%	1.18%	1.17%	1.16%

Middle

School Year	2012-2013 (actual)	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23
Membership	1,684	1,733	1,772	1,777	1,785	1,824	1,903	1,930	1,939	1,959	1,979
Average % Increase		2.92%	2.22%	0.30%	0.48%	2.18%	4.32%	1.41%	0.47%	1.04%	1.02%

High School

School Year	2012-2013 (actual)	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23
Membership	2,315	2,355	2,366	2,359	2,429	2,472	2,460	2,520	2,555	2,591	2,667
Average % Increase		1.71%	0.48%	-0.29%	2.97%	1.77%	-0.51%	2.45%	1.39%	1.41%	2.93%

Chapel Hill/Carrboro Student Projections

Elementary

School Year	2012-2013 (actual)	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23
Membership	5,543	5,612	5,676	5,764	5,837	5,875	5,945	6,014	6,084	6,160	6,236
Average % Increase		1.25%	1.15%	1.55%	1.26%	0.65%	1.18%	1.17%	1.16%	1.24%	1.23%

Middle

School Year	2012-2013 (actual)	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23
Membership	2,785	2,862	2,934	2,972	3,004	3,072	3,133	3,179	3,188	3,225	3,261
Average % Increase		2.75%	2.53%	1.30%	1.07%	2.26%	2.00%	1.46%	0.28%	1.15%	1.14%

High School

School Year	2012-2013 (actual)	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23
Membership	3,796	3,828	3,866	3,910	4,016	4,108	4,167	4,235	4,324	4,374	4,447
Average % Increase		0.84%	0.98%	1.15%	2.72%	2.28%	1.43%	1.63%	2.09%	1.17%	1.67%

2013-2014

Orange County Student Projections

Elementary

School Year	2013-2014 (actual)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23	2023-24
Membership	3,433	3,472	3,555	3,597	3,627	3,668	3,716	3,764	3,812	3,861	3,906
Average % Increase		1.14%	2.39%	1.18%	0.84%	1.13%	1.30%	1.29%	1.28%	1.28%	1.17%

Middle

School Year	2013-2014 (actual)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23	2023-24
Membership	1,747	1,789	1,805	1,824	1,862	1,933	1,951	1,953	1,967	1,987	2,010
Average % Increase		2.38%	0.94%	1.03%	2.07%	3.85%	0.90%	0.12%	0.71%	1.04%	1.12%

High School

School Year	2013-2014 (actual)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23	2023-24
Membership	2,421	2,406	2,411	2,468	2,533	2,534	2,600	2,642	2,678	2,742	2,767
Average % Increase		-0.61%	0.18%	2.40%	2.63%	0.03%	2.59%	1.62%	1.39%	2.36%	0.93%

Chapel Hill/Carrboro Student Projections

Elementary

School Year	2013-2014 (actual)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23	2023-24
Membership	5,554	5,635	5,748	5,845	5,927	6,021	6,090	6,166	6,241	6,323	6,405
Average % Increase		1.47%	2.00%	1.69%	1.41%	1.57%	1.15%	1.24%	1.23%	1.31%	1.30%

Middle

School Year	2013-2014 (actual)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23	2023-24
Membership	2,858	2,925	2,947	2,962	2,999	3,063	3,134	3,190	3,257	3,299	3,342
Average % Increase		2.35%	0.76%	0.50%	1.24%	2.13%	2.32%	1.78%	2.11%	1.30%	1.30%

High School

School Year	2013-2014 (actual)	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-23	2023-24
Membership	3,764	3,805	3,825	3,893	3,982	4,011	4,050	4,086	4,112	4,199	4,268
Average % Increase		1.08%	0.54%	1.78%	2.27%	0.75%	0.96%	0.88%	0.65%	2.10%	1.65%

E. Student / Housing Generation Rate

1. ***Responsible Entity for Suggesting Change*** – The updating of this section will be conducted by Planning Directors, School Representatives, and Technical Advisory Committee (SAPFOTAC) and referred to the BOCC for certification.

Projections will be distributed to SAPFO partners for review and comments to the BOCC prior to certification.

2. ***Definition*** – A projected number of students that are generated from four different types of housing, “single-family detached”, “single-family attached”, “multifamily”, and “manufactured homes”, as defined in Appendix C to the 2007 TischlerBise School Impact Fee Report.

3. ***Standard for:***

Chapel Hill Carrboro School District See Attachment II.E.1	Standard for: Orange County School District See Attachment II.E.1
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4. ***Analysis of Existing Conditions***

On October 6, 2009, the Orange County Board of Commissioners approved the updated Student Generation Rates as recommended by the SAPFOTAC. The newly adopted Student Generation Rates became effective the 2010-11 school year with the November 15, 2010 CAPS system update. The current standards are shown in Attachment II.E.1. Both Orange County Schools and Chapel Hill-Carrboro City Schools have recognized a larger increase in students generated from developments in both districts, particularly the multi-family housing. The SAPFOTAC discussed the increased number of students generated in both districts and proposed multi-family projects that may continue to have an effect on student membership numbers. While this may be a short term trend caused by the current economic climate or other factors, the SAPFOTAC recommends further evaluation of the adopted Student Generation Rates and the impacts different types of housing may have on student membership rates. Orange County Planning staff has contacted the consultant used to do this type of work in the past to obtain a cost estimate. It is expected that a new study to update only student generation rates would cost

Section II

between \$12,000 to \$20,000 with the lower end of the range being more probable, given knowledge of the types of data Orange County has ready access to.

Also, it should be noted that students are generated from new housing as well as from existing housing where new families have moved in. The CAPS system estimates new development impacts and associated student generation, but it is important to understand that student increases are a composite of both of these factors. This effect can be dramatic and can vary greatly between areas and districts where either new housing is dominant or new families move into a large inventory of existing housing stock.

5. ***Recommendation – No Change***

The SAPFOTAC does not recommend a change at this time. However, the SAPFOTAC continues to recommend further evaluation of the Student Generation Rates to determine whether a change is warranted. The last impact fee level study (which includes the calculation of student generation rates) was conducted in 2007 so it may be time to initiate another study to ensure up-to-date data is used for both SAPFO purposes and impact fee purposes. Alternatively, a study to analyze only student generation rates, separate from any study regarding school impact fees, can be completed. The cost for such a study is estimated at between \$12,000 to \$20,000.

TischlerBise Student Generation Rates - 2007

Chapel Hill-Carrboro Schools				
	Elementary	Middle	High	All Grades
Single-Family Detached	0.263	0.143	0.197	0.603
Single-Family Attached	0.158	0.077	0.115	0.350
Multifamily	0.038	0.015	0.017	0.070
Manufactured Homes	0.141	0.066	0.061	0.268
All Housing Types	0.149	0.078	0.105	0.332

Orange County Schools				
	Elementary	Middle	High	All Grades
Single-Family Detached	0.168	0.090	0.126	0.384
Single-Family Attached / Multifamily	0.066	0.022	0.034	0.122
Manufactured Homes	0.096	0.041	0.049	0.186
All Housing Types	0.145	0.074	0.102	0.321

Source: School Impact Fees – Orange County Schools, TischlerBise, December 31, 2007

III. FLOWCHART OF SCHOOLS ADEQUATE PUBLIC FACILITIES ORDINANCE PROCESS

Abstract: The Schools Adequate Public Facilities Ordinance process has two distinct components:

A. Capital Investment Plan (CIP) (Process 1)

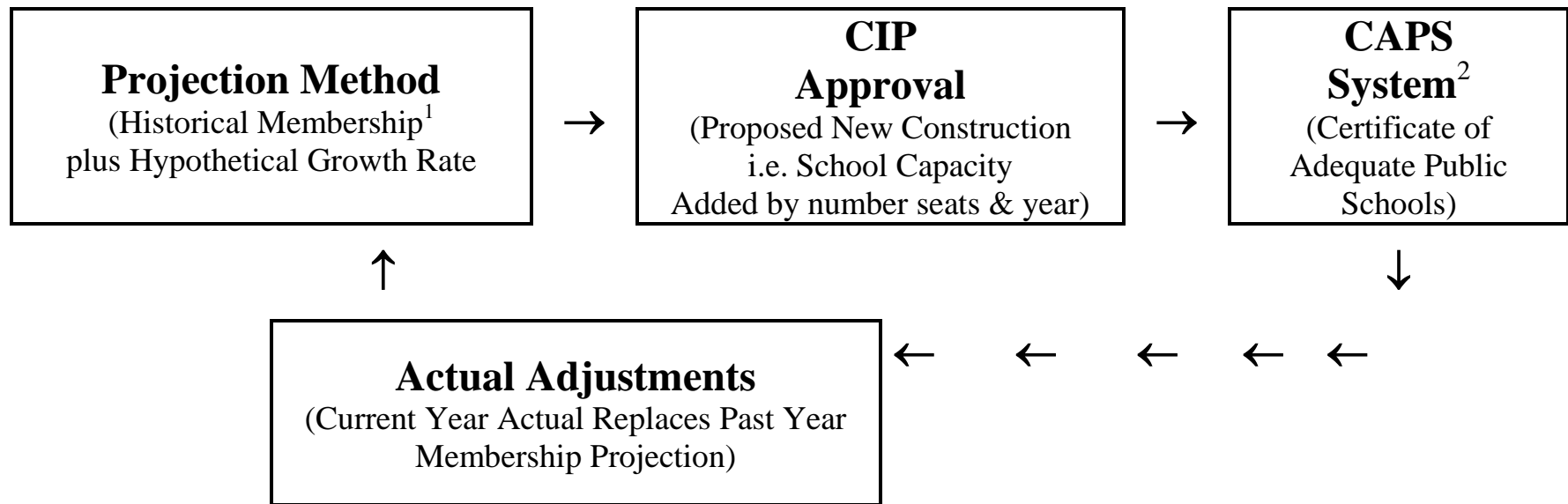
Timeframe: In November of each year, Student Membership and Building Capacity is transmitted from the school districts to the Orange County Board of Commissioners for consideration and approval and used in the following years CIP (e.g. November 15, 2013 membership numbers used to develop a CIP to be considered for adoption in June 2014).

Process Framework

1. SAPFOTAC projects future student membership from historical data, current membership and hypothetical growth rates from established methodologies.
2. School Districts and BOCC compare projections to existing capacity and proposed Capital Investment Plan.
3. SAPFOTAC forwards data and projections to all Schools APFO partners.
4. School Districts develop Capital Investment Plan Needs Assessment during this process
5. The Capital Investment Plan work sessions and Public Hearings are conducted by the BOCC in the spring of each year.
6. The adoption of CIP that sets forth monies and timeframe for school construction (future capacity) by BOCC.

School Adequate Public Facilities Ordinance

Process 1 - Capital Investment Planning (CIP)



¹Historical Membership is a product of students generated from: (1) pre-existing/approved undeveloped lots where new housing is built, (2) existing housing stock with new families/children, and (3) newly approved housing development (in the future this component will be known as CAPS approved development)

²The only part of the CAPS System (i.e., computer spreadsheet subdivision tracking) that receives data from the Process 1 CIP includes the actual membership (November 15 of preceding CIP year) and new school capacity amount (seats) in a specific year pursuant to the CIP.

B. Schools Adequate Public Facilities Ordinance

Certificate of Adequate Public Schools (CAPS)

Update (Process 2)

Timeframe: The CAPS system is updated approximately November 15 of each year when the school districts report actual membership and ‘pre-certified’ capacity, whether it is CIP associated or prior ‘joint action’ agreement. ‘Joint action’ determinations of changes in capacity due to State rules or other non-construction related items are anticipated to be done prior to the November 15 capacity and membership reporting date. This update may reflect the Board of County Commissioners action on the earlier year Capital Investment Plan (CIP) as it affects capacity and addition of new actual fall membership. The Schools Adequate Public Facilities Ordinance Certificate of Adequate Public Schools (CAPS) stays in effect until the following year – (e.g.: November 15, 2005 to November 14, 2006).

New development is originally logged for a certain year. As the CAPS system is updated, each CAPS projection year is ‘absorbed’ by the actual estimate of a given year. Later year CAPS projections of the same development remain in the future year CAPS system accordingly. For example, if a 50-lot subdivision is issued a CAPS, 15 lots may be assigned to “Year 1,” 10 lots to “Year 2,” 10 lots to “Year 3,” 10 lots to “Year 4,” and 5 lots to “Year 5.” When “Year 1” is updated, the students generated from the 15 lots are absorbed by the actual estimate. The students generated in “Years 2, 3, 4, and 5” are held in the CAPS system and added to the appropriate year when the CAPS system is updated.

As was discussed in Section II.C, The City of Mebane is not a party to the SAPFO and does not require that CAPS be issued prior to approving development activities. However, residential development within the Orange County portion of Mebane has increased dramatically prior to 2009, but has slowed considerably due to the current economic climate. Currently, there are approximately 1,000 approved undeveloped residential lots in the portion of Mebane that lies within Orange County. Increasing development within this area of the county has the potential to encumber a significant portion of the available capacity within the Orange County School

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District. Although the SAPFO system is not formally regulated in Mebane, staff monitors development activity and when students enter the school system their enrollment is calculated and used in future school projection needs.

Please note that the two processes (CIP and CAPS) are on separate, but parallel tracks. However, the CIP does create a crossover of capacity information between the two processes. For example, the Schools APFO system for both school districts that will be established / initiated / certified each year in November and is based on prior year created and/or planned CIP capacity and current school year membership. The SAPFOTAC report including new current year membership and projections are to be used for upcoming CIP development as noted in Process 1.

CIP Process 1 (for CIP 2014 - 2024)

November 2013 – June 2014 (using 2014 SAPFOTAC Report)

Schools APFO CAPS Process 2 (for Schools APFO System 2014– 2015)

November 2013 - November 2014

School Adequate Public Facilities Ordinance

Process 2 - Certificate of Adequate Public Schools (CAPS) Allocation

2014 CAPS system is effective November 15, 2013 through November 14, 2014.

The system is updated with new membership, CIP capacity changes, and any other BOCC/School District joint action approved capacity prior to November 15, 2013. This information is received within 5 days of November 15 and posted within the next 15 days. This CAPS system recalibration is retroactive to November 15, 2013 .

CAPS Allocation System

1. Certified Capacity
2. LOS Capacity
3. **Actual** Membership
4. Year Start Available Capacity
5. Ongoing Current Available Capacity (includes available capacity decreases from approved CAPS development by year)
6. CAPS approved development
 - a. Total units
 - b. Single Family¹
 - c. Other Housing¹

CAPS System

$$AC^2 = SC^2 - (ADM^2 + ND1^2 + ND2^2 + \dots)$$

$AC \geq 0$ - Issue CAPS

$AC < 0$ - Defer CAPS to later date

¹Student Generation Rates from CAPS housing type create future membership estimate. Please note that this CAPS membership future estimate is different than the projection based on historical data and projection models used in the CIP process 1. This estimate only captures new development impact, which is the component that the SAPFO can regulate.

²AC - Available Capacity - Starts at Annual Update Capacity and reduces as CAPS approved development is entered into the system.

SC - Certified School Level Capacity

ADM - Average Daily Membership

ND - New Development; ND1 means first approved CAPS approved development

CHCCS Student Projections ^{(1) (4)}

Elementary

School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Actual	4,444	4,474	4,551	4,692	4,695	4,879	4,980	5,173	5,302	5,219	5,296	5,464	5,543	5,554										
Tischler ⁽²⁾															5,647	5,741	5,834	5,928	6,021	6,114	6,208	6,301	6,394	6,488
OC Planning															5,655	5,732	5,809	5,884	5,959	6,033	6,133	6,233	6,362	6,492
10 Year Growth															5,637	5,781	5,893	5,978	6,083	6,143	6,205	6,267	6,330	6,393
5 Year Growth															5,610	5,727	5,826	5,904	6,001	6,061	6,122	6,183	6,245	6,307
3 Year Growth															5,628	5,759	5,864	5,943	6,039	6,099	6,160	6,222	6,284	6,347
Average															5,635	5,748	5,845	5,927	6,021	6,090	6,166	6,241	6,323	6,405
Annual Change - Increase (Decrease) in Actual & Projected Membership)		30	77	141	3	184	101	193	129	(83)	77	168	79	11	81	113	97	82	93	69	76	76	82	82
Capacity - 100% Level of Service (LOS)	4,302	4,302	4,302	4,921	4,921	4,921	4,921	4,921	5,244	5,244	5,244	5,244	5,244	5,829	5,829	5,829	5,829	5,829	5,829	5,829	5,829	5,829	5,829	5,829
Number of Students, Actual and Projected, Over (Under) 100% LOS	142	172	249	(229)	(226)	(42)	59	252	58	(25)	52	220	299	(275)	(194)	(81)	16	98	192	261	337	412	494	576
Capacity - 105% Level of Service (LOS)	4,517	4,517	4,517	5,167	5,167	5,167	5,167	5,167	5,506	5,506	5,506	5,506	5,506	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120
Number of Students, Actual and Projected, Over (Under) 105% LOS	(73)	(43)	34	(475)	(472)	(288)	(187)	6	(204)	(287)	(210)	(42)	37	(566)	(485)	(372)	(275)	(193)	(100)	(30)	45	121	203	285
Actual - % Level of Service	103.3%	104.0%	105.8%	95.3%	95.4%	99.1%	101.2%	105.1%	101.1%	99.5%	101.0%	104.2%	105.7%	95.3%										
Average - % Level of Service															96.7%	98.6%	100.3%	101.7%	103.3%	104.5%	105.8%	107.1%	108.5%	109.9%
Annual Student Growth Rate (3)		0.68%	1.72%	3.10%	0.06%	3.92%	2.07%	3.88%	2.49%	-1.57%	1.48%	3.17%	1.45%	0.20%	1.47%	2.00%	1.69%	1.41%	1.57%	1.15%	1.24%	1.23%	1.31%	1.30%

Elementary #9 opens in fall 2003 with additional 619 seats

indicates when district surpasses Schools APFO recommended Level of Service

Per November 15, 2005 Certified Capacity Calculations, CHCCS projects Elementary #10 opening for school year 2008-09. In accordance with BOCC adopted School Construction Standards, elementary school capacity totals 600 students.

Important Note: Per 2005 agreement of School Collaboration Work Group, Grades K-3 class size reduced from 1:23 to 1:21 the year Elementary #10 opens (to allow for prior Legislative Action re: reduced class size)

Elementary School #11 opens with 585 seats.

- (1) It is important to note that this reflects the November 15, 2012 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.
- (2) The Tischler Model provides for the "**Linear Method**" of **projections** for both CHCCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.
- (3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23
- (4) Class sizes for grades K-3 = 1:23 for school years 2000 through 2007-08. In accordance with 2005 School Collaboration Work Group direction, effective the 2008-2009 school year with the opening of CHCCS Elementary #10, K-3 class sizes are 1:21 as directed by past State legislative action.

CHCCS Student Projections ⁽¹⁾

Middle

School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Actual	2,326	2,540	2,608	2,612	2,560	2,572	2,592	2,622	2,697	2,708	2,722	2,753	2,785	2,858										
Tischler ⁽²⁾															2,906	2,954	3,002	3,050	3,098	3,146	3,194	3,242	3,290	3,339
OC Planning															2,889	2,929	2,969	3,034	3,099	3,165	3,231	3,298	3,366	3,433
10 Year Growth															2,957	2,976	2,986	3,019	3,097	3,186	3,246	3,327	3,360	3,394
5 Year Growth															2,930	2,922	2,903	2,913	2,968	3,040	3,092	3,162	3,193	3,225
3 Year Growth															2,943	2,955	2,950	2,978	3,051	3,131	3,184	3,254	3,287	3,320
Average															2,925	2,947	2,962	2,999	3,063	3,134	3,190	3,257	3,299	3,342
Annual Change - Increase (Decrease) in Actual & Projected Membership		214	68	4	(52)	12	20	30	75	11	14	31	32	73	67	22	15	37	64	71	56	67	42	43
Capacity - 100% Level of Service	2,108	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,840	2,944	2,944	2,944	2,944	2,944	2,944	2,944	2,944	2,944	2,944
Number of Students, Actual and Projected, Over (Under) 100% LOS	218	(300)	(232)	(228)	(280)	(268)	(248)	(218)	(143)	(132)	(118)	(87)	(55)	18	(19)	3	18	55	119	190	246	313	355	398
107% Level of Service	2,256	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,039	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150
Number of Students, Actual and Projected, Over (Under) 107% LOS	70	(499)	(431)	(427)	(479)	(467)	(447)	(417)	(342)	(331)	(317)	(286)	(254)	(181)	(225)	(203)	(188)	(151)	(87)	(16)	39	107	149	192
Actual - % Level of Service	110.3%	89.4%	91.8%	92.0%	90.1%	90.6%	91.3%	92.3%	95.0%	95.4%	95.8%	96.9%	98.1%	100.6%										
Average - % Level of Service															99.4%	100.1%	100.6%	101.9%	104.0%	106.4%	108.3%	110.6%	112.1%	113.5%
Annual Student Growth Rate (3)		9.20%	2.68%	0.15%	-1.99%	0.47%	0.78%	1.16%	2.86%	0.41%	0.52%	1.14%	1.16%	2.62%	2.35%	0.76%	0.50%	1.24%	2.13%	2.32%	1.78%	2.11%	1.30%	1.30%

indicates when district surpasses Schools APFO recommended Level of Service

Culbreth addition proposed to add 104 seats

- (1) It is important to note that this reflects the November 5, 2012 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.
- (2) The Tischer Model provides for the **"Linear Method"** of projections for both CHCCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.
- (3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23

CHCCS Student Projections ⁽¹⁾

High

School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Actual	2,815	2,963	3,162	3,330	3,422	3,514	3,520	3,635	3,630	3,606	3,640	3,714	3,796	3,764										
Tischler ⁽²⁾																								
OC Planning																								
10 Year Growth																								
5 Year Growth																								
3 Year Growth																								
Average																								
Annual Change - Increase (Decrease) in Actual & Projected Membership																								
Capacity - 100% Level of Service	3,035	3,035	3,035	3,035	3,035	3,035	3,035	3,835	3,835	3,835	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875
Number of Students, Actual and Projected, Over (Under) 100% LOS	(220)	(72)	127	295	387	479	485	(200)	(205)	(229)	(235)	(161)	(79)	(111)	(70)	(50)	18	107	136	175	211	237	324	393
110% Level of Service	3,339	3,339	3,339	3,339	3,339	3,339	3,339	4,219	4,219	4,219	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263	4,263
Number of Students, Actual and Projected, Over (Under) 110% LOS	(524)	(376)	(177)	(9)	83	176	182	(584)	(580)	(613)	(623)	(549)	(467)	(499)	(458)	(437)	(369)	(281)	(251)	(212)	(177)	(150)	(64)	6
Actual - % Level of Service	92.8%	97.6%	104.2%	109.7%	112.8%	115.8%	116.0%	94.8%	94.7%	94.0%	93.9%	95.8%	98.0%	97.1%										
Average - % Level of Service																								
Annual Student Growth Rate (3)		5.26%	6.72%	5.31%	2.76%	2.69%	0.17%	3.27%	-0.14%	-0.66%	0.94%		2.03%	2.21%	-0.84%	98.2%	98.7%	100.5%	102.8%	103.5%	104.5%	105.4%	108.4%	110.1%
																1.08%	0.54%	1.78%	2.27%	0.75%	0.96%	0.88%	0.65%	1.65%

indicates when district surpasses Schools APFO recommended Level of Service

- (1) It is important to note that this reflects the November 15, 2012 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance. It does not include CHCCS students attending the Hospital School.
- (2) The Tischer Model provides for the **"Linear Method" of projections** for both CHCCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.
- (3) Annual growth rate calculated using actual membership for years 2000-01 through 2012-13 and average membership for years 2013-14 through 2022-23

The Tischler model uses 14 years of historical data, but do to space constraints only 10 years of historical data are included in the above tables.

high school #3 opens in fall 2007 with 800 additional seats

Phoenix Academy High School becomes official high school starting 2010-11 school year with 40 student capacity

OCS Student Projections ⁽¹⁾ (4)

Elementary																								
School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Actual	3,078	2,893	2,901	2,945	3,016	3,006	3,072	3,158	3,165	3,211	3,285	3,348	3,403	3,433										
Tischler ⁽²⁾															3,493	3,553	3,614	3,674	3,734	3,794	3,854	3,914	3,975	4,035
OC Planning															3,492	3,559	3,626	3,695	3,765	3,835	3,905	3,975	4,046	4,099
10 Year Growth															3,457	3,550	3,575	3,578	3,601	3,637	3,674	3,710	3,748	3,785
5 Year Growth															3,471	3,580	3,619	3,634	3,663	3,700	3,737	3,774	3,812	3,850
3 Year Growth															3,448	3,535	3,553	3,556	3,579	3,615	3,651	3,688	3,725	3,762
Average															3,472	3,555	3,597	3,627	3,668	3,716	3,764	3,812	3,861	3,906
Annual Change - Increase (Decrease) in Actual & Projected Membership)		(185)	8	44	71	(10)	66	86	7	46	74	63	55	30	39	83	42	30	41	48	48	48	49	45
Capacity - 100% Level of Service	3,820	3,820	3,820	3,820	3,820	3,920	3,922	3,922	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694	3,694
Number of Students, Actual and Projected, Over (Under) 100% LOS	(742)	(927)	(919)	(875)	(804)	(914)	(850)	(764)	(529)	(483)	(409)	(346)	(291)	(261)	(222)	(139)	(97)	(67)	(26)	22	70	118	167	212
105% Level of Service	4,011	4,011	4,011	4,011	4,011	4,116	4,118	4,118	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879	3,879
Number of Students, Actual and Projected, Over (Under) 105% LOS	(933)	(1,118)	(1,110)	(1,066)	(995)	(1,110)	(1,046)	(960)	(714)	(668)	(594)	(531)	(476)	(446)	(406)	(323)	(281)	(251)	(210)	(163)	(114)	(66)	(18)	28
Actual - % Level of Service	80.6%	75.7%	75.9%	77.1%	79.0%	76.7%	78.3%	80.5%	85.7%	86.9%	88.9%	90.6%	92.1%	92.9%										
Average - % Level of Service															94.0%	96.2%	97.4%	98.2%	99.3%	100.6%	101.9%	103.2%	104.5%	105.7%
Annual Student Growth Rate (3)		-6.01%	0.28%	1.52%	2.41%	-0.33%	2.20%	2.80%	0.22%	1.45%	2.30%	1.92%	1.64%	0.88%	1.14%	2.39%	1.18%	0.84%	1.13%	1.30%	1.29%	1.28%	1.28%	1.17%

additional 100 new seats @ Hillsborough Elementary

Important Note: Per 2005 recommendation of School Collaboration Work Group and approved by BOCC with approval of 2008-09 Membership & Capacity numbers and certification of 2009 SAPFOTAC report of May 5, 2009, Grades K-3 class size reduced from 1:23 to 1:21 with opening of CHCCS Elementary #10-Morris Grove (to allow for prior legislative action re: reduced class size)

⁽¹⁾ It is important to note that this reflects the November 15, 2013 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance.
⁽²⁾ The Tischler Model provides for the **"Linear Method" of projections** for both CHCCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.
⁽³⁾ Annual growth rate calculated using actual membership for years 2000-01 through 2013-14 and average membership for years 2014-15 through 2023-24
⁽⁴⁾ Class sizes for grades K-3 = 1:23 for school years 2000 through 2007-08. In accordance with 2005 School Collaboration Work Group direction, effective the 2008-2009 school year with the opening of CHCCS Elementary #10, K-3 class sizes are 1:21 as directed by past State legislative action.

OCS Student Projections ⁽¹⁾

Middle																								
School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Actual	1,504	1,527	1,631	1,671	1,593	1,590	1,580	1,637	1,601	1,665	1,698	1,704	1,684	1,747										
Tischler ⁽²⁾															1,778	1,808	1,839	1,869	1,900	1,931	1,961	1,992	2,023	2,053
OC Planning															1,777	1,823	1,869	1,917	1,957	1,980	1,995	2,009	2,023	2,045
10 Year Growth															1,796	1,804	1,813	1,853	1,947	1,955	1,940	1,946	1,965	1,985
5 Year Growth															1,799	1,803	1,807	1,848	1,954	1,978	1,975	1,987	2,007	2,027
3 Year Growth															1,793	1,789	1,792	1,821	1,909	1,910	1,894	1,900	1,919	1,938
Average															1,789	1,805	1,824	1,862	1,933	1,951	1,953	1,967	1,987	2,010
Annual Change - Increase (Decrease) in Actual & Projected Membership)		23	104	40	(78)	(3)	(10)	57	(36)	64	33	6	(20)	63	42	17	19	38	72	17	2	14	20	22
Capacity - 100% Level of Service	1,466	1,466	1,466	1,466	1,466	1,466	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166	2,166
Number of Students, Actual and Projected, Over (Under) 100% LOS	38	61	165	205	127	124	(586)	(529)	(565)	(501)	(468)	(462)	(482)	(419)	(377)	(361)	(342)	(304)	(233)	(215)	(213)	(199)	(179)	(156)
107% Level of Service	1,569	1,569	1,569	1,569	1,569	1,569	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318	2,318
Number of Students, Actual and Projected, Over (Under) 107% LOS	(65)	(42)	62	102	24	21	(738)	(681)	(717)	(653)	(620)	(614)	(634)	(571)	(529)	(512)	(494)	(456)	(384)	(367)	(365)	(351)	(330)	2,318
Actual - % Level of Service	102.6%	104.2%	111.3%	114.0%	108.7%	108.5%	72.9%	75.6%	73.9%	76.9%	78.4%	78.7%	77.7%	80.7%										
Average - % Level of Service															82.6%	83.4%	84.2%	85.9%	89.3%	90.1%	90.2%	90.8%	91.8%	92.8%
Annual Student Growth Rate (3)		1.53%	6.81%	2.45%	-4.67%	-0.19%	-0.63%	3.61%	-2.20%	4.00%	1.98%	0.35%	-1.17%	3.74%	2.38%	0.94%	1.03%	2.07%	3.85%	0.90%	0.12%	0.71%	1.04%	1.12%

middle school #3 opens in fall 2006 with 700 additional seats

⁽¹⁾ It is important to note that this reflects the November 15, 2013 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance.
⁽²⁾ The Tischler Model provides for the **"Linear Method" of projections** for both CHCCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.
⁽³⁾ Annual growth rate calculated using actual membership for years 2000-01 through 2013-14 and average membership for years 2014-15 through 2023-24

OCS Student Projections ⁽¹⁾

High																								
School Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Actual	1,672	1,753	1,828	1,887	2,057	2,124	2,184	2,201	2,242	2,217	2,222	2,283	2,315	2,421										
Tischler ⁽²⁾															2,463	2,506	2,548	2,591	2,633	2,676	2,718	2,760	2,803	2,845
OC Planning															2,434	2,459	2,484	2,534	2,576	2,618	2,652	2,685	2,718	2,760
10 Year Growth															2,404	2,358	2,401	2,471	2,443	2,529	2,581	2,616	2,688	2,698
5 Year Growth															2,436	2,418	2,461	2,523	2,499	2,583	2,631	2,678	2,774	2,802
3 Year Growth															2,294	2,312	2,448	2,548	2,519	2,592	2,627	2,653	2,726	2,731
Average															2,406	2,411	2,468	2,533	2,534	2,600	2,642	2,678	2,742	2,767
Annual Change - Increase (Decrease) in Actual & Projected Membership)		81	75	59	170	67	60	17	41	(25)	5	61	32	106	(15)	4	58	65	1	66	42	37	63	25
Capacity - 100% Level of Service	1,518	1,518	2,518	2,518	2,518	2,518	2,533	2,533	2,558	2,558	2,558	2,558	2,439	2,439	2,439	2,439	2,439	2,439	2,439	2,439	2,439	2,439	2,439	2,439
Number of Students, Actual and Projected, Over (Under) 100% LOS	154	235	(690)	(631)	(461)	(394)	(349)	(332)	(316)	(341)	(336)	(275)	(124)	(18)	(33)	(28)	29	94	95	161	203	239	303	328
110% Level of Service	1,670	1,670	2,770	2,770	2,770	2,770	2,786	2,786	2,814	2,814	2,814	2,814	2,683	2,683	2,683	2,683	2,683	2,683	2,683	2,683	2,683	2,683	2,683	2,683
Number of Students, Actual and Projected, Over (Under) 110% LOS	2	83	(942)	(883)	(713)	(646)	(602)	(585)	(572)	(597)	(592)	(531)	(368)	(262)	(277)	(272)	(215)	(150)	(149)	(83)	(41)	(4)	59	84
Actual - % Level of Service	110.1%	115.5%	72.6%	74.9%	81.7%	84.4%	86.2%	86.9%	87.6%	86.7%	86.9%	89.2%	94.9%	99.3%										
Average - % Level of Service															98.7%	98.8%	101.2%	103.9%	103.9%	106.6%	108.3%	109.8%	112.4%	113.5%
Annual Student Growth Rate (3)		4.84%	4.28%	3.23%	9.01%	3.26%	2.82%	0.78%	1.86%	-1.12%	0.23%	2.75%	1.40%	4.58%	-0.61%	0.18%	2.40%	2.63%	0.03%	2.59%	1.62%	1.39%	2.36%	0.93%

cedar ridge high opens with 1,000 seats in fall 2002

Partnership Academy Alternative School capacity added

Partnership Academy Alternative School relocated - capacity added

Orange High capacity decreased, per DPI study

⁽¹⁾ It is important to note that this reflects the November 15, 2013 date of membership as outlined in by the Schools Adequate Public Facilities Ordinance.
⁽²⁾ The Tischler Model provides for the **"Linear Method" of projections** for both CHCCS and OCS. Original projections used in prior years projection models included the "Linear Extrapolation Method" for CHCCS.
⁽³⁾ Annual growth rate calculated using actual membership for years 2000-01 through 2013-14 and average membership for years 2014-15 through 2023-24

The Tischler model uses 14 years of historical data, but do to space constraints only 10 years of historical data are included in the above tables.

**ORANGE COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: March 18, 2014

**Action Agenda
Item No.** 6-e

SUBJECT: Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
Member Agencies Memorandum of Understanding Revisions

DEPARTMENT: Planning and Inspections

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

1. Flowchart of the MOU Revision Process
2. Updated MOU with Changes Noted
3. Existing MOU (Executed 1994)

INFORMATION CONTACT:

Bret Martin, Transportation Planner, 245-2582
Tom Altieri, Comprehensive Planning Supervisor, 245-2579
Craig Benedict, Planning Director, 245-2592

PURPOSE: To approve and authorize the Chair to sign a final draft of an updated/revised Memorandum of Understanding (MOU) among the member agencies of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO).

BACKGROUND: The DCHC MPO is a transportation planning agency charged with fulfilling federally mandated metropolitan planning requirements influencing the use of federal transportation funding within the Durham Urbanized Area (UZA) and the area beyond the UZA boundary expected to become urbanized within 20 years. The MPO is a partnership of the member governments within the Durham UZA/MPO planning area and the North Carolina Department of Transportation in cooperation with the United States Department of Transportation. Membership within the MPO is established through an MOU between its local government member organizations/jurisdictions that was last executed in 1994.

The MPO has developed an updated/revised member agency MOU reflecting changes in federal and state legislation and regulations, the MPO's function and structure, and its and its member government responsibilities. In concert with the MOU update/revision process illustrated in Attachment 1, the BOCC first reviewed a draft updated MOU at its September 5, 2013 meeting, provided comments on the draft revisions, and submitted these comments to the MPO along with comments generated by other MPO member governments. These comments were reviewed by the MPO's Technical Coordinating Committee (TCC) and governing board, and the MPO subsequently made changes to the draft MOU based on these comments.

At its January 23, 2014 meeting, the BOCC reviewed and considered the updated/revised MOU with the changes having been incorporated. However, the BOCC did not approve the MOU and asked that clarifying language regarding what constitutes a quorum of the MPO Board as well as other minor edits be incorporated into the MOU. These comments were echoed by some other member governments and were subsequently incorporated into a new draft of the MOU to be redistributed for adoption by the member local governments. The incorporation of these