# COLLEGE PRICING IS CONFUSING, SCHOOLS ARE INCONSISTENT IN THEIR PRICE COMPARABILITY AND CONSISTENCY.

Siyabonga Mabuza, Luther College.

## **ABSTRACT**

College pricing is confusing due to the inconsistencies of price comparability for students with similar profiles. There are dramatic price differences in net prices resulting in students having a vast range of prices to choose from when applying to higher education institutions.

This paper examines these stark price differences as well as the inconsistencies arising from them. A focus is given to 10 cross application schools from Iowa and Minnesota.

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#### INTRODUCTION

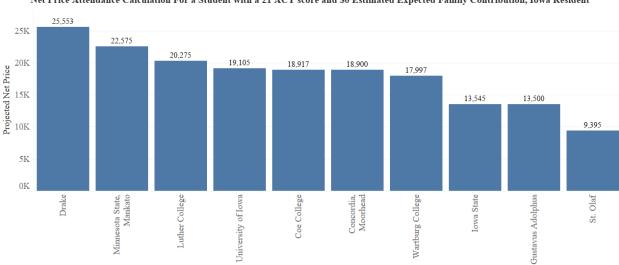
In an examination of data gathered on net price paid by students upon enrollment at higher education institutions there emerged inconsistencies in pricing comparability and consistency. This study focused on net price data from 10 cross application colleges and universities using the net price calculators on the schools' respective websites. Consistent assumptions for gender, income, family size, assets and other inputs were used to obtain these values. For each school, 12 scenarios were projected using four different academic profiles and three different family adjusted gross income levels. The four academic profiles consist of students with ACT and Grade Point Average (GPA) scores of 21/2.8, 24/3.4, 27/3.7, and 30/3.95, respectively. The three different family adjusted gross income levels consist of students with Expected Family Contributions (EFC) of \$0, \$25,000, and \$300,000. The 10 schools used in this study are:

- 1. Luther College
- 2. Wartburg College
- 3. St. Olaf College
- 4. Drake University
- 5. Coe College
- 6. Gustavus Adolphus College
- 7. Concordia, Moorhead
- 8. Iowa State University
- 9. University of Iowa
- 10. Minnesota State, Mankato

These 10 institutions were selected because they compete in the same market and are therefore compete for the same students. Furthermore, they possess similar programs of study and levels of prestige. A large portion of students who enroll at each these 10 institutions have the other institutions as alternatives.

#### TOP LEVEL PRICE DISCREPANCIES

At the top level, there are numerous dramatic and confusing discrepancies in pricing for students with similar academic and economic profiles. Let's consider a series of different scenarios for students with an estimated family contribution of \$0. The net price attendance calculation for such a student who is an Iowa resident with an ACT and GPA of 21 and 2.8, respectively is shown below.

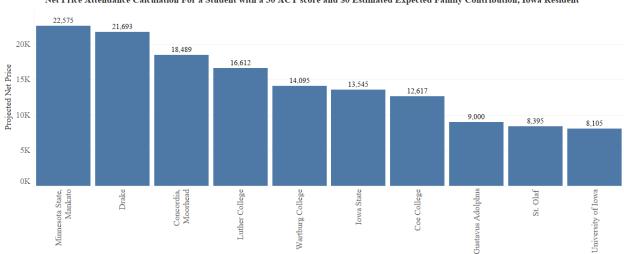


Net Price Attendance Calculation For a Student with a 21 ACT score and \$0 Estimated Expected Family Contribution, Iowa Resident

Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

The dramatic price difference for students with this profile is evident. This comparison shows the vast range of prices students have in net price when applying to higher education institutions. The difference in net price between the most expensive institution, Drake at \$25,553 and the least expensive institution, St. Olaf at \$9,395 is \$16,158. This dramatic difference accentuates the inconsistencies and variance in net price. This variance exists even at a higher ACT and GPA.

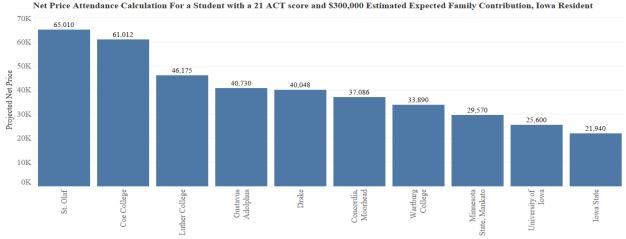
Below is a graph depicting a different net price attendance calculation scenario for a student who is an Iowa resident with an ACT and GPA of 30 and 3.95, respectively and a family contribution of \$0.



Net Price Attendance Calculation For a Student with a 30 ACT score and \$0 Estimated Expected Family Contribution, Iowa Resident

Similar to the first example there are substantial differences in net price. The difference in net price between the most expensive institution, Minnesota State, Mankato at \$22,575 and the least expensive institution, University of Iowa at \$8,105 is \$14,470. This, from a cost of attendance perspective puts the more expensive schools at a disadvantage.

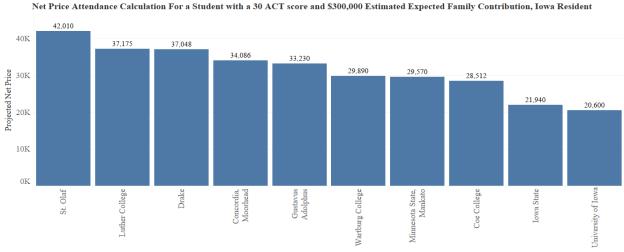
A focus on students with higher economic profiles conveys an analogous dramatic pattern in the inconsistencies in net price between higher education institutions. Let's consider a series of different scenarios for students with an estimated family contribution of \$300,000 now. The net price attendance calculation for such a student who is an Iowa resident with an ACT and GPA of 21 and 2.8, respectively is shown below.



Source: Net Price Calculation using each Institution's Net Price Calculation for enrolling class in Fall 2021

Due to the higher economic profile, the average net price across all institutions has increased, however, the dramatic difference in net price remains the same. The difference in net price between the most expensive institution, St. Olaf at \$65,010 and the least expensive institution, Iowa State University at \$21,940 is \$43,070.

Below is a graph illustrating a different net price attendance calculation scenario for a student who is an Iowa resident with an ACT and GPA of 30 and 3.95, respectively and a family contribution of \$300,000.



Once more, there are disparities in net price. The difference in net price between the most expensive institution, St. Olaf at \$42,010 and the least expensive institution, University of Iowa at \$20,600 is \$21,410.

Overall, it is evident regardless of consistent academic and economic profiles that higher education institutions have dramatic differences in net price of attendance, this is confusing.

#### A DEEPER ANALYSIS OF COLLEGES' RESPONSIVENESS TO ECONOMIC NEED

Upon comparing the difference in net price dependent on economic and academic profiles between the 10 aforementioned institutions, an analysis of price variance with within each institution was made. This section of the paper will focus on Coe College as an example to examine colleges' responsiveness to economic need.

Below is a table showing the range of prices at Coe College contingent on academic ability and economic need.

COE COLLEGE	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	\$18,917	\$14,517	\$12,617	\$12,617
\$25,000.00	\$34,512	\$32,612	\$28,812	\$28,512
\$300,000.00	\$61,012	\$33,512	\$30,512	\$28,512

Source: Net Price Calculation using Coe College's Net Price Calculator for enrolling class in Fall 2021.

Generally, Coe's net price is relatively responsive to academic ability and economic need. However, it is important to acknowledge the difference between net price and estimated family contribution. A student with an estimated family contribution of \$0 applying to the institution has to pay a rage of \$12,617-\$18,917 depending on their academic ability. This is on average \$14,667 more than they are financially able to pay. This student would most likely have to take out a student loan to pay this. In contrast, a student with an estimated family contribution of \$25,000 applying to the institution has to pay a rage of \$28,512-34,512 depending on their academic ability. This is on average \$6,112 more than they are financial able to pay. Moreover, a student with an estimated family contribution of \$300,000 applying to the institution has to pay a rage of \$28,512-\$61,012 depending on their academic ability. This is on average \$261,613 less than they are financial able to pay. The difference between net price and economic need seems to be decreasing as the students' estimated family contribution increases.

This dramatic difference between net price and economic need conveys the inability of higher education institutions to appropriately adjust their net prices to the economic needs of students.

#### COMPETITIVENESS BASED UPON ACADEMIC AND ECONOMIC PROFILES

Interestingly, the competitiveness of colleges varies depending on the academic and economic profiles of the students. A focus will be given to Luther College to illustrate how, depending upon the profile of the student, the institution can be relatively more or less competitive.

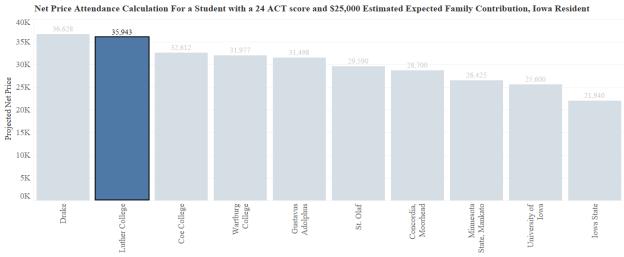
Below is a graph illustrating a comparison of net price for a student who is an Iowa resident with an ACT and GPA of 24 and 3.4, respectively and a family contribution of \$0.

Net Price Attendance Calculation For a Student with a 24 ACT score and \$0 Estimated Expected Family Contribution, Iowa Resident

Source: Net Price Calculation using each Institution's Net Price Calculation for enrolling class in Fall 2021

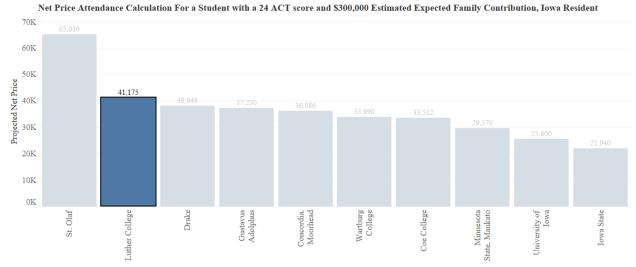
Luther College is the 5<sup>th</sup> most expensive school compared to its competitors for a student with this profile. The institution is \$9,049 more expensive almost double the cost of the least expensive institution, St. Olaf College. However, it is \$5,109 cheaper than the most expensive institution, Drake College. Thus, the institution is around the medium of competitiveness compared to the other institutions examined in the study.

Moreover, below is a graph illustrating a different comparison of net price for a student who is an Iowa resident with an ACT and GPA of 24 and 3.4, respectively and a family contribution of \$25,000.



For a student with this profile, Luther College is the 2<sup>nd</sup> most expensive school compared to its competitors. It is \$14,003 more expensive than the cheapest institution, Iowa State, and \$685 cheaper than the most expensive institution, Drake. For this student, Luther College is expensive compared to its competitors and is not competitive in regard to price.

Lastly, below is a graph illustrating the final comparison of net price for a student who is an Iowa resident with an ACT and GPA of 24 and 3.4, respectively and a family contribution of \$25,000.



Source: Net Price Calculation using each Institution's Net Price Calculation for enrolling class in Fall 2021

For a student with this profile, again Luther College is the 2<sup>nd</sup> most expensive school compared to its competitors. It is \$19,235 more expensive than the cheapest institution, Iowa State, and \$23,835 cheaper than the most expensive institution, St. Olaf. Luther College is more expensive compared to competitors and is thus less competitive pertaining to price.

It is evident, the competitiveness of a school depends on the profile of the student wishing to enroll. For some profiles schools can be more competitive, however, they can also be less competitive for other profiles.

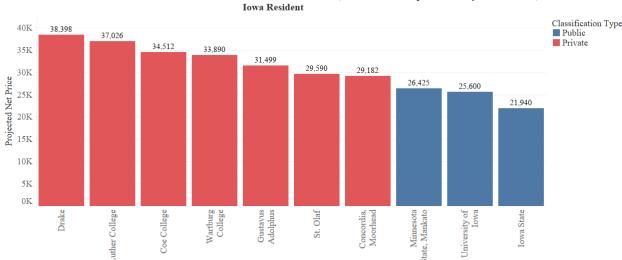
It is important for schools to ascertain they have more competitive prices for profiles that they wish to attract to their institutions.

### PRIVATE VS PUBLIC

While collating the net price data from the 10 institutions there emerged a stark difference in net price between private and public institutions. Public institutions for most profiles are generally less expensive than private institutions.

Below is a graph illustrating a comparison of net price for a student who is an Iowa resident with an ACT and GPA of 21 and 2.8, respectively and a family contribution of \$25,000.

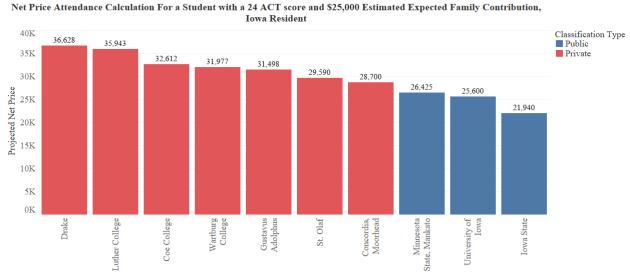
Net Price Attendance Calculation For a Student with a 21 ACT score and \$25,000 Estimated Expected Family Contribution,



Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

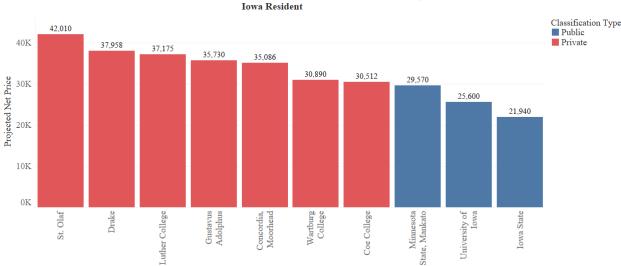
For a student with this profile, the three public institutions considered in this study are less expensive than the seven private institutions. This price difference is maintained even for students with higher academic abilities at the same estimated family contribution level.

Below is a graph illustrating a different comparison of net price for a student who is an Iowa resident with an ACT and GPA of 24 and 3.4, respectively and a family contribution of \$25,000.



Similar to the last example, the three public institutions considered in this study are cheaper than the seven private institutions. Let's consider a different academic and economic profile.

Below is a graph showing a different comparison of net price for a student who is an Iowa resident with an ACT and GPA of 27 and 3.75, respectively and an estimated family contribution of \$300,000.

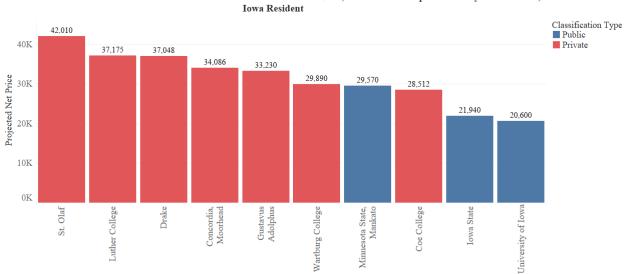


Net Price Attendance Calculation For a Student with a 27 ACT score and \$300,000 Estimated Expected Family Contribution,

Source: Net Price Calculation using each Institution's Net Price Calculation for enrolling class in Fall 2021

This relationship between net price and institution type is maintained. The three public schools are less expensive than the seven private institutions. Let's consider a final example for a student with a higher academic ability at the same income level.

Below is a graph showing a different comparison of net price for a student who is an Iowa resident with an ACT and GPA of 30 and 3.95, respectively and an estimated family contribution of \$300,000.



Net Price Attendance Calculation For a Student with a 30 ACT score and \$300,000 Estimated Expected Family Contribution,

Apart from Coe College, the public institutions in this study again are less expensive than the private institutions. These examples illustrate a broader pattern of public institutions generally being less expensive than private institutions and therefore being more competitive in regard to price

#### CONCLUSION

College pricing is confusing and there are inconsistencies in pricing comparability for students with similar profiles. This has resulted in students having a vast range of prices to choose from when applying to higher education institutions. Furthermore, this has resulted in institutions being more competitive for some student profiles while being less competitive for others. Colleges need to ensure that they are more price competitive for the profiles of students they wish to attract.

Moreover, there is a stark difference in net price between public and private institutions. For a large portion of student profiles, public schools are generally less expensive than private schools. This makes public schools a better option for students who are more price elastic. A lower net price can also mean that students have to take less student loans, this is a significant factor which can also represent a competitive edge for public schools.

More clarity, consistency and transparency is required in college pricing. The dramatic price differences for students with the same profiles raises questions on the factors institutions use to determine net prices for students.

# **SOURCES FOR DATA**

- 1. Data on higher education enrollment is provided by the National Center for Education Statistics.
- 2. Data on student debt is from The Institute for College Access and Success. Most college-level data are taken directly from U.S. Department of Education sources and the Common Data Set (CDS).

# **APPENDICES**

# APPENDIX I

# **NET PRICE CALCULATOR 12x12 GRIDS**

Luther College	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/ 3.95
\$0.00	20,275	18,444	16,612	16,612
\$25,000.00	37,026	35,943	34,862	34,861
\$300,000.00	46,175	41,175	37,175	37,175

Coe College	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	18,917	14,517	12,617	12,617
\$25,000.00	34,512	32,612	28,812	28,512
\$300,000.00	61,012	33,512	30,512	28,512

Gustavus Adolphus	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	13,500	12,500	11,500	9,000
\$25,000.00	31,499	31,498	31,499	31,499
\$300,000.00	40,730	37,230	35,730	33,230

Concordia, Moorhead	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	18,900	18,900	18,489	18,489
\$25,000.00	29,182	28,700	28,700	28,700
\$300,000.00	37,086	36,086	35,086	34,086

Wartburg College	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	17,967	15,095	14,095	14,095
\$25,000.00	33,890	31,977	30,890	29,890
\$300,000.00	33,890	33,890	30,890	29,890

St. Olaf College	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	9,395	9,395	9,395	8,395
\$25,000.00	29,590	29,590	29,590	28,690
\$300,000.00	65,010	65,010	42,010	42,010

University Of Iowa	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	19,105	19,105	13,105	8,105
\$25,000.00	25,600	25,600	24,999	20,600
\$300,000.00	25,600	25,600	25,600	20,600

Minnesota State Mankato	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	22,575	22,575	22,575	22,575
\$25,000.00	26,425	26,425	26,425	26,425
\$300,000.00	29,570	29,570	29,570	29,570

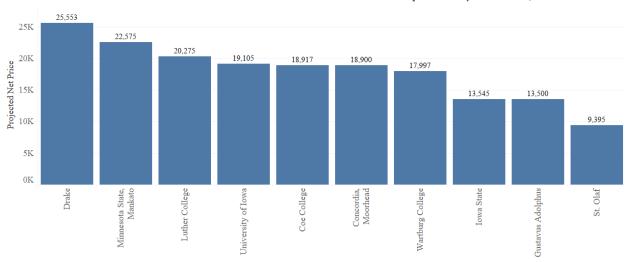
Drake University	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	25,553	23,553	23,013	21,693
\$25,000.00	38,398	36,628	35,748	34,418
\$300,000.00	40,048	38,048	37,958	37,048

Iowa State University	ACT/GPA			
EFC	21/2.8	24/3.4	27/3.75	30/3.95
\$0.00	13,545	13,545	13,545	13,545
\$25,000.00	21,940	21,940	21,940	21,940
\$300,000.00	21,940	21,940	21,940	21,940

## APPENDIX II

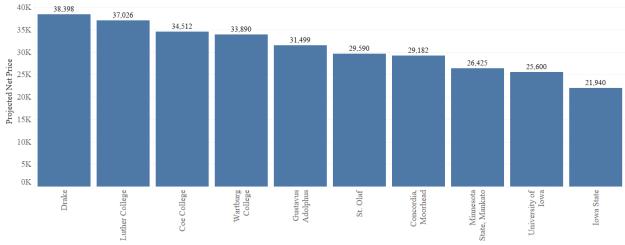
# NET PRICE CALCULATOR GRAPHS, IOWA RESIDENT

Net Price Attendance Calculation For a Student with a 21 ACT score and \$0 Estimated Expected Family Contribution, Iowa Resident

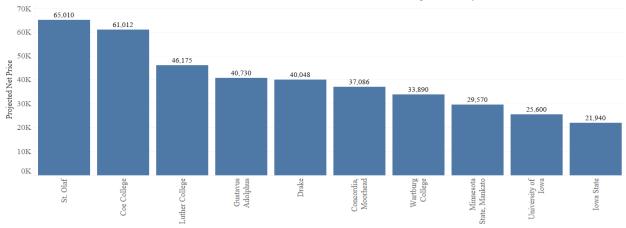


Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

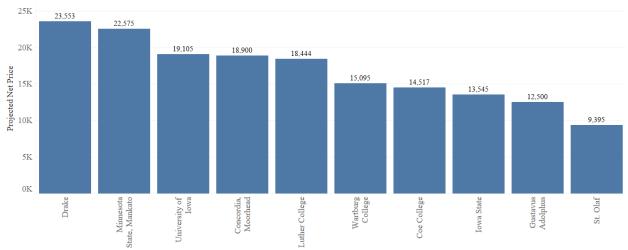
## Net Price Attendance Calculation For a Student with a 21 ACT score and \$25,000 Estimated Expected Family Contribution, Iowa Resident



Net Price Attendance Calculation For a Student with a 21 ACT score and \$300,000 Estimated Expected Family Contribution, Iowa Resident

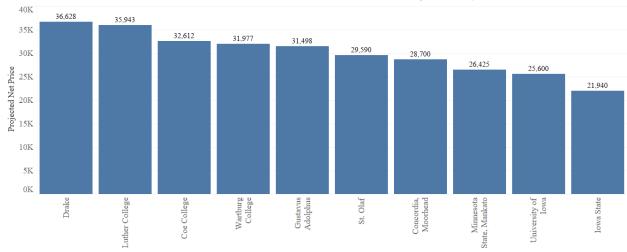


Net Price Attendance Calculation For a Student with a 24 ACT score and \$0 Estimated Expected Family Contribution, Iowa Resident

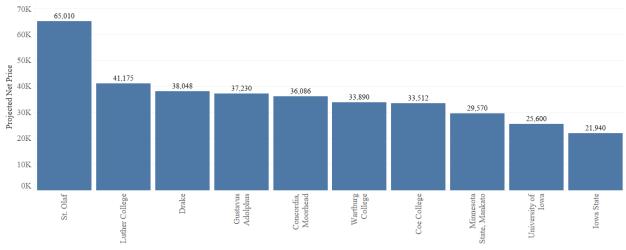


Source: Net Price Calculation using each Institution's Net Price Calculation for enrolling class in Fall 2021

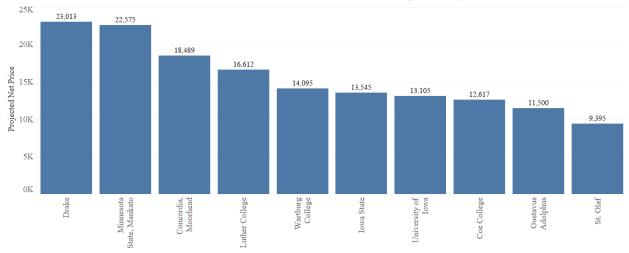
Net Price Attendance Calculation For a Student with a 24 ACT score and \$25,000 Estimated Expected Family Contribution, Iowa Resident



Net Price Attendance Calculation For a Student with a 24 ACT score and \$300,000 Estimated Expected Family Contribution, Iowa Resident

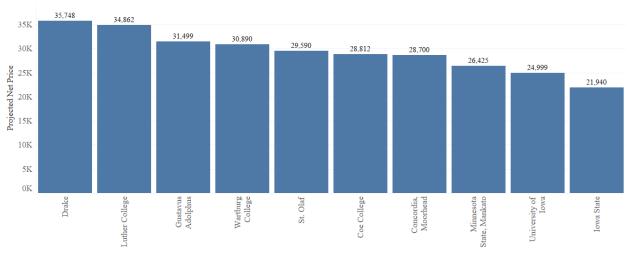


Net Price Attendance Calculation For a Student with a 27 ACT score and 80 Estimated Expected Family Contribution, Iowa Resident

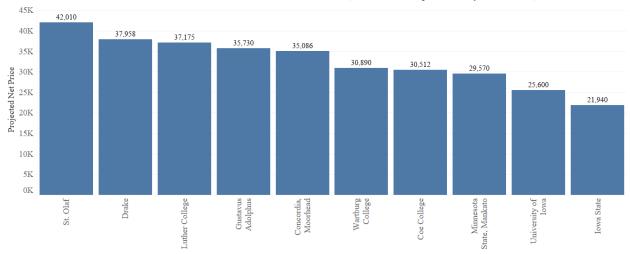


Source: Net Price Calculation using each Institution's Net Price Calculation for enrolling class in Fall 2021

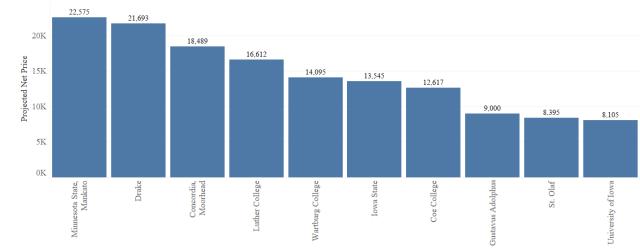
Net Price Attendance Calculation For a Student with a 27 ACT score and \$25,000 Estimated Expected Family Contribution, Iowa Resident



Net Price Attendance Calculation For a Student with a 27 ACT score and \$300,000 Estimated Expected Family Contribution, Iowa Resident

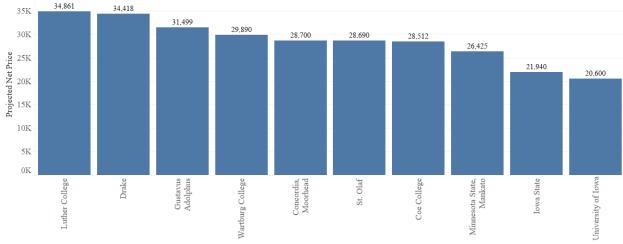


Net Price Attendance Calculation For a Student with a 30 ACT score and \$0 Estimated Expected Family Contribution, Iowa Resident

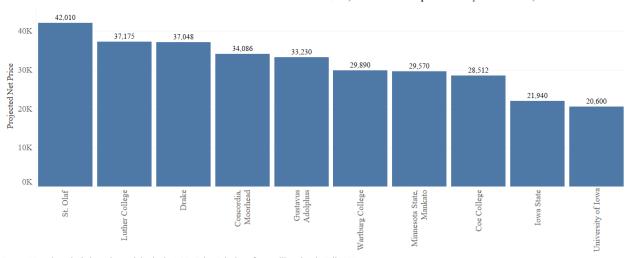


Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

Net Price Attendance Calculation For a Student with a 30 ACT score and \$25,000 Estimated Expected Family Contribution, Iowa Resident



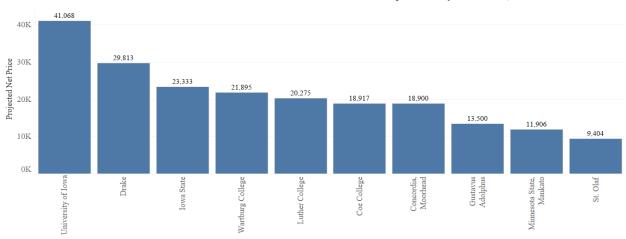
Net Price Attendance Calculation For a Student with a 30 ACT score and \$300,000 Estimated Expected Family Contribution, Iowa Resident



## APPENDIX III

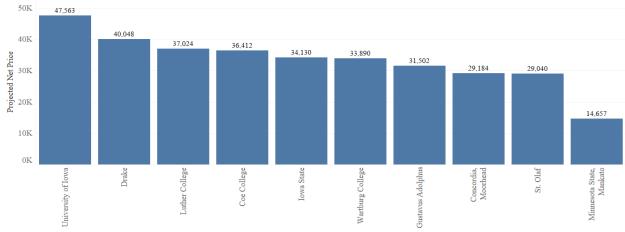
## NET PRICE CALCULATOR GRAPHS, MINNESOTA RESIDENT

Net Price Attendance Calculation For a Student with a 21 ACT score and \$0 Estimated Expected Family Contribution, Minnesota Resident



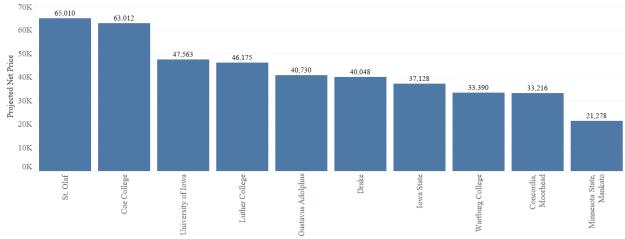
Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

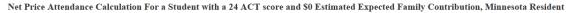
Net Price Attendance Calculation For a Student with a 21 ACT score and \$25,000 Estimated Expected Family Contribution, Minnesota Resident

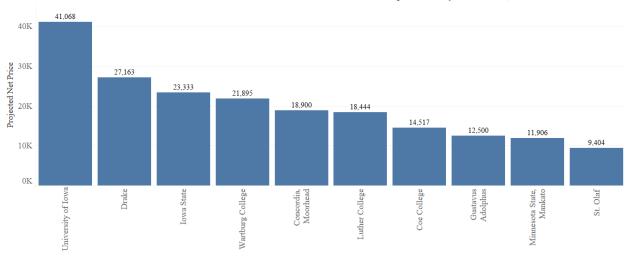


Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

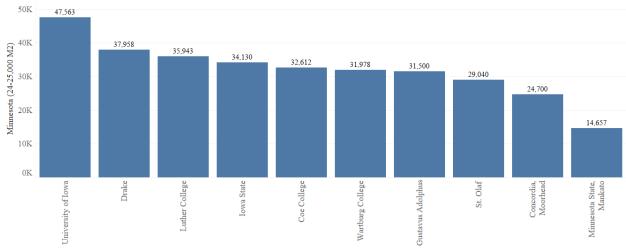
Net Price Attendance Calculation For a Student with a 21 ACT score and \$300,000 Estimated Expected Family Contribution, Minnesota Resident





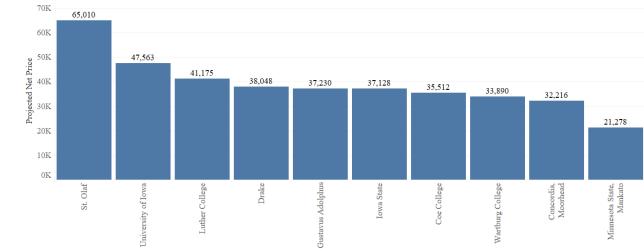


#### Net Price Attendance Calculation For a Student with a 24 ACT score and \$25,000 Estimated Expected Family Contribution, Minnesota Resident

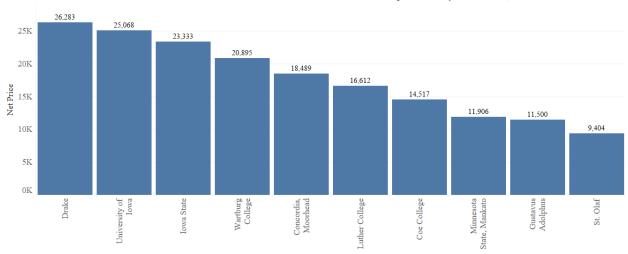


Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

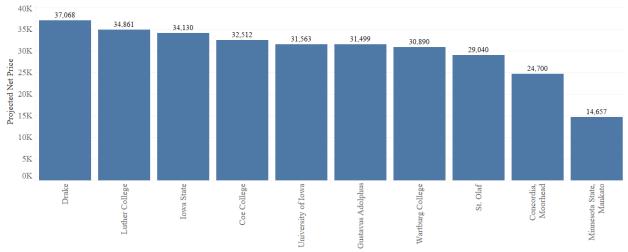




Net Price Attendance Calculation For a Student with a 27 ACT score and 80 Estimated Expected Family Contribution, Minnesota Resident

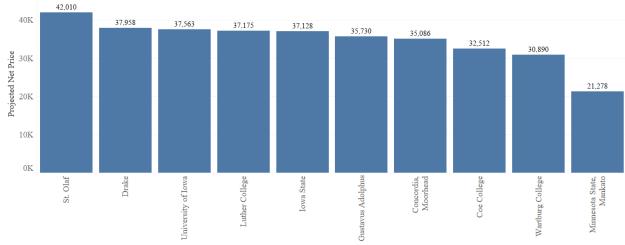


Net Price Attendance Calculation For a Student with a 27 ACT score and \$25,000 Estimated Expected Family Contribution, Minnesota Resident

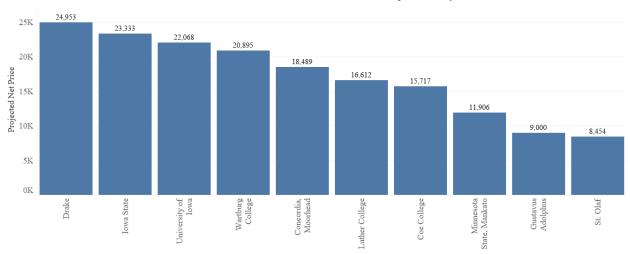


Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

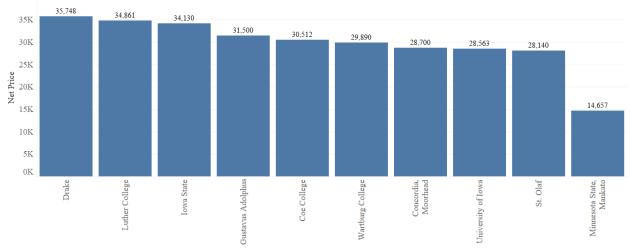
Net Price Attendance Calculation For a Student with a 27 ACT score and \$300,000 Estimated Expected Family Contribution, Minnesota Resident



Net Price Attendance Calculation For a Student with a 30 ACT score and \$0 Estimated Expected Family Contribution, Minnesota Resident



Net Price Attendance Calculation For a Student with a 30 ACT score and \$25,000 Estimated Expected Family Contribution, Minnesota Resident



Source: Net price calculation using each institution's Net Price Calculator for enrolling class in Fall 2021

Net Price Attendance Calculation For a Student with a 30 ACT score and \$300,000 Estimated Expected Family Contribution, Minnesota Resident

